



# STONE GATE

## PLANNED UNIT DEVELOPMENT HANDBOOK

PREPARED FOR THE CITY OF RENO



Revised ~~February 1~~October 30, 2018

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## I. INTRODUCTION

### a. Objectives

The objective of the StoneGate PUD is to establish design standards that address the following:

- Sensitivity to, and connectivity with, adjacent open space features including trails and U.S. Forest Service lands.
- Utilization of sensitive grading, protection of environmentally constrained lands, Low Impact Development (LID) design standards and natural drainage facilities required for development of the site.
- Maintenance of the historic ranch aesthetics of the property including use of trails, preservation of open space, incorporation of interpretive signage and use of architectural features such as monumentation and building design that is complementary to the ranch theme.
- Remaining sensitive to the surrounding density and lot sizes with the existing development to the west.

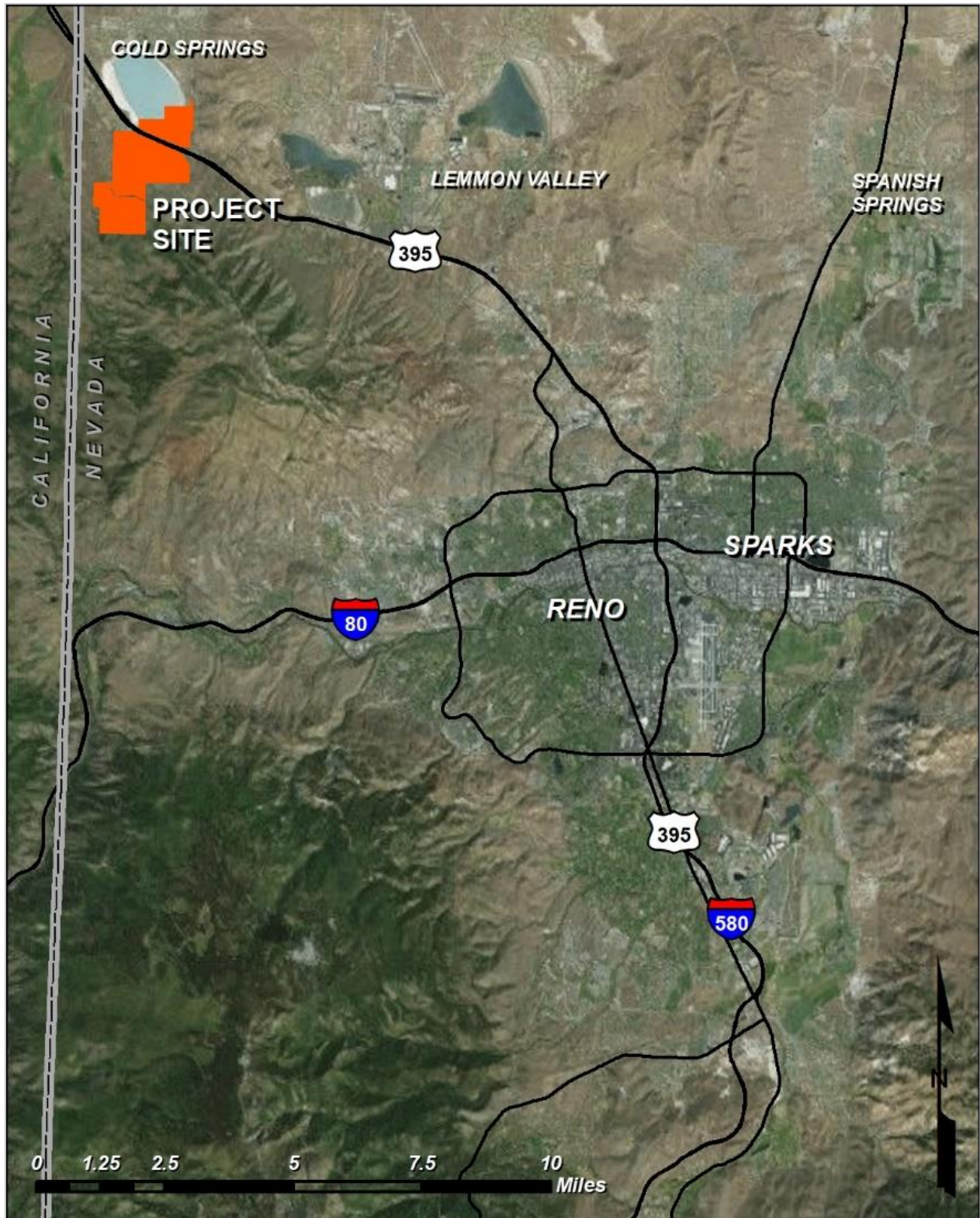
### b. Project Description

The StoneGate Planned Unit Development (PUD) is a ±1,737-acre property located west of the White Lake Parkway in the Cold Springs area (Figure 2 – StoneGate Vicinity Map). The project area is bifurcated by U.S. 395 with approximately 1,378 acres on the south side and approximately 359 acres on the north side. The property is surrounded by White Lake to the north, public lands (both BLM and U.S. Forest Service lands) to the east and a portion of the south, and by private property to the south, west and a portion of the east.

StoneGate is a master planned community that incorporates a mix of uses and densities and includes residential, schools, open space, parks, an extensive trail corridor network, and retail and industrial uses that support continued growth in the region. StoneGate design standards have been created to protect and enhance the site's natural features including gentle slopes, drainageways, viewsheds, and native vegetation. The integrated trails and drainageways link the developed areas to the open space via natural connections that promote a livable, walkable community, designed to be sensitive to its surroundings. All development within StoneGate must be in accordance with the design standards outlined in this PUD handbook. The development plan for StoneGate includes the following Land Use Categories and acreages (Figure 1 – Land Use Table):

<b>Figure 1: Land Use Table</b>		
<b>Land Use Designation</b>	<b>Acreage (acres)</b>	<b>Units (approx.)</b>
Multi-family	935	380
SF4		2,495
SF6		910
LLR-1		350
Neighborhood Center	12	-
Town Center	146	865 (MF units)
Industrial	39	-
Parks	50	-
Road Right-of-Way	120	-
Common Open Space	435	-
<b>TOTAL</b>	<b>1,737 acres</b>	<b>5,000</b>





**Figure 2: StoneGate Vicinity Map**

## II. IMPLEMENTATION

The StoneGate PUD shall be administered by the Zoning Administrator or his/her designee as defined in the City of Reno Land Development Code. The Zoning Administrator shall have the authority to reasonably interpret and apply this PUD Handbook. Figures and graphic representations contained herein are intended as general visual aids in understanding the intent of the various requirements and do not represent any actual lot or building plan, nor are they intended to serve as exhaustive examples of every possible situation. **Upon application to the City of Reno, each phase of development shall demonstrate conformance with standards contained within the PUD Handbook.**

Heinz Ranch Land Company, LLC shall be the Master Developer for the development of the PUD. Should the rights of the Master Developer under this PUD Handbook be designated or assigned to another entity, the assignor shall notify the City of Reno in writing and provide documentation of the change in entity. The Master Developer shall continue throughout the development of the PUD until and unless a master homeowner's association or other entity is authorized to serve the role of the Master Developer.

The Master Developer shall be responsible for constructing the major infrastructure and common area improvements. The role of the Master Developer, for the purposes of this PUD, shall be:

- To prescribe and administer methods and procedures to ensure and control the quality of development that occurs within the StoneGate PUD.
- To design the open space, parks and trail corridor areas including site amenities and design elements.
- To construct, or have constructed, and maintain all common area improvements, storm drain and/or irrigation channels, detention basins, and other flood control facilities.
- To construct and maintain all common area landscaping, community amenities, parks, pathways, trails, and sidewalks until and unless a master homeowner's association or other entity is created to perform those functions.
  - All open drainage improvements will be owned and maintained by a Drainage Association established and organized as a limited purpose association under NRS Chapter 116. Until such time as the Drainage Association is established, the open drainage improvements will be owned and maintained by Master Developer.
- To construct, or have constructed, all arterial and collector roadways in conformance with the PUD.
- To construct, or have constructed, all master infrastructure including sewer, water, freeway improvements, etc. to provide services to the site.
- To submit the permits for all off-site infrastructure improvements, including the U.S. 395 frontage road and sewer lines, as required through each applicable governmental entity, including Nevada Department of Transportation (NDOT) or Washoe County, and shall be subject to the conditions placed by that individual entity.
- To establish Covenants, Conditions and Restrictions (CC&Rs), which will allow for the creation of an Architectural Review Committee (ARC) to maintain consistent project architecture and a master homeowner's association for maintenance and operations of common elements of the PUD and enforcement of the CC&Rs. Individual residential builders will create sub-CC&Rs and HOAs that will provide additional provisions that apply to the individual phases and homeowners.

- To construct, or have constructed, and maintain all parks and trail pathways. The trail and park construction costs may be credited toward the PUDs required Residential Construction Tax (RCT), subject to approval by the City Council.

There shall be no third-party beneficiaries to these design guidelines and requirements.

## **a. Definitions**

**Applicant** – The entity or person applying or submitting for a permit/entitlement application. The applicant may be the Master Developer or the Merchant Builder and is dependent on who is submitting for a specific application.

**Master Developer** – An entity or person who buys, sells, or develops a planned unit development, including, without limitation, a person who enters into a development agreement pursuant to NRS 278.0201.

**Merchant Builder** – An entity or person who buys, sells, or develops Super Pad Parcels.

**Neat Streets** – Neat streets are a street category designed as multimodal connections within neighborhoods, used to access trails and open spaces within the community. This street type includes a 46-foot-wide right-of-way, a ten-foot-wide travel lane, bike lanes on both sides of the road, and parking on one side to control traffic speeds and maintain a safe pedestrian and bike environment.

**Subdivision of Land** – Division of land into smaller parcels.

**Super Pad Parcels** – The primary development parcels, which are created by the first subdivision of land within a Phase into more than four parcels, are referred to herein as “Super Pad Parcels” and shall meet the following standards:

- a) Super Pad Parcels shall be a minimum of nine acres in size.
- b) Exceptions: Right-of-way, public facilities, utilities, common area, and open space parcels shall not be subject to a minimum parcel size.
- c) In addition to the exceptions noted in item b. above, a maximum of two Super Pad Parcels per phase may be less than nine acres in size to accommodate remainder parcels.

## **b. Review Process**

Only the City of Reno, Master Developer or its authorized designee may initiate an amendment to this PUD. Prior to the submittal of each development application to the City, it shall be reviewed and approved by the Master Developer at their sole discretion. Each development application submitted to the City shall include written documentation of approval from the Master Developer, as to its conformance with all applicable standards in this PUD. Once the ARC is established, written documentation of approval from the ARC shall replace the written documentation from the Master Developer, as to its conformance with all applicable standards in this PUD. Written approval by the Master Developer and/or the ARC does not constitute City approval of a development application.

The construction of individual projects by merchant builders, including accessory structures, shall follow the City of Reno building permit process.



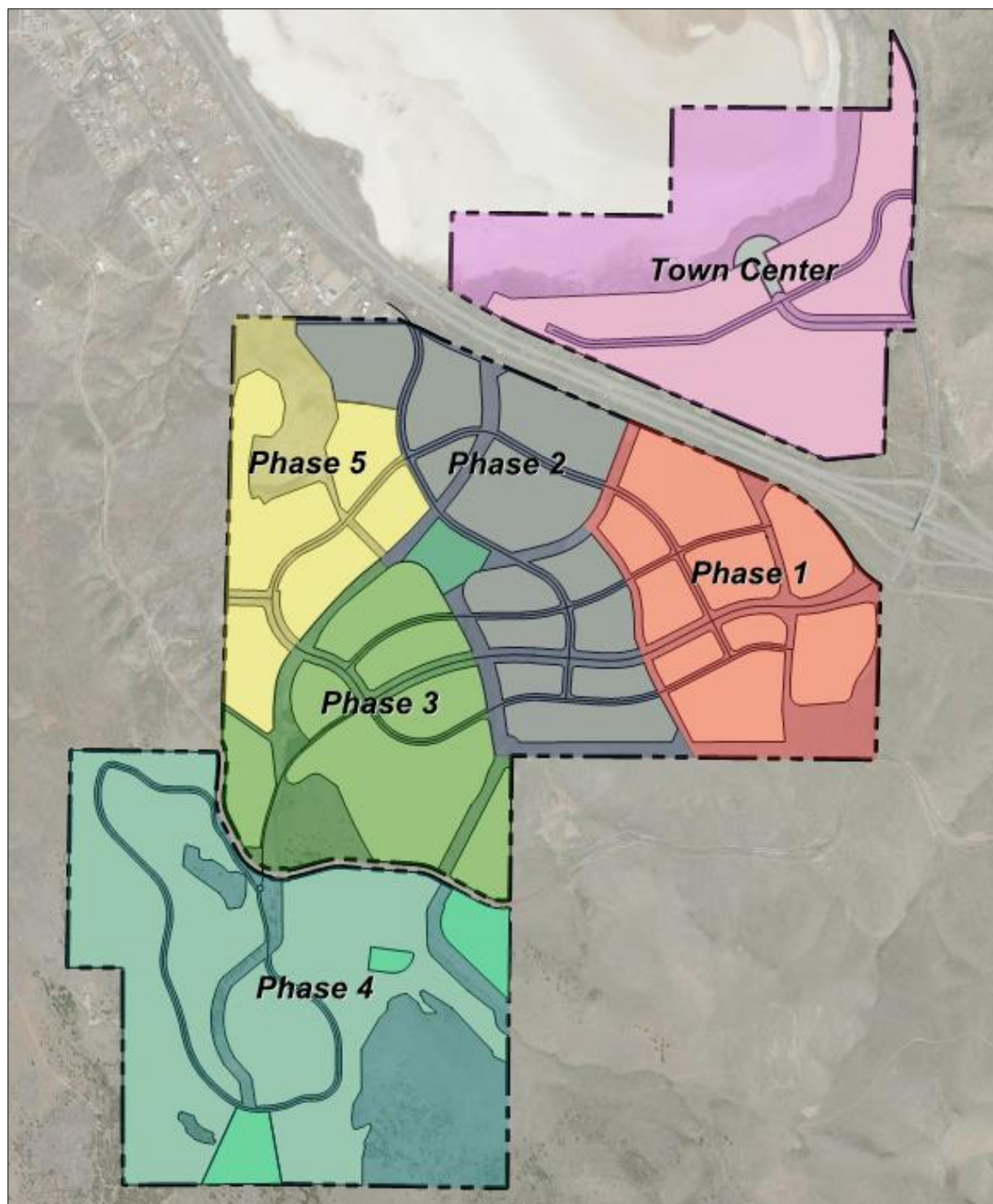
### **c. Phasing**

The development and build-out of StoneGate will ultimately be dependent on market conditions. This PUD shall be valid and enforceable for 20 years. The 20-year time frame shall commence upon final approval of this PUD (as evidenced by the initial recording date of the certified handbook). All project phasing must include major infrastructure (i.e. backbone utilities and roadways) to support development. If the project is not completed at the end of 20 years, then the PUD shall require an application to the Reno City Council to determine if it is appropriate to extend the development schedule prior to further development. Completion is defined as the recordation of all Master Developer's parcel maps (creation of Super Pad Parcels) for all phases; and construction of the community center. This also includes construction of all mass grading, on and off-site backbone infrastructure including water, sewer, arterial and collector roadways, and construction of all improvements affecting major drainageways. The time frame shall not apply to the construction of individual homes on recorded lots of approved final maps or for construction of permitted non-residential uses, as described in the PUD Handbook.

The overall project phasing, as outlined in this PUD Handbook on Figure 3, is subject to change at the Master Developer's discretion, with concurrence from City of Reno, based on market conditions and development of adjacent properties. The project will be built-out in a minimum of five phases, with the Master Developer responsible for constructing the master backbone infrastructure. The individual developers of the Super Pad Parcels will be responsible for the internal infrastructure, roads and access to trails, and dedication of public improvements for development of their Super Pad Parcels. There are no maximum or minimum number of lots required per final map, except that each final map must have at least five lots.

Each tentative map, special use permit and final map, as applicable, shall be a standalone project and shall include all public and private infrastructure for roadways, landscaping, water service, sanitary sewer, drainage, utilities, project entryway signage, and pedestrian circulation necessary to serve the affected area.





**Figure 3: Conceptual Development Phasing**

## **Subdivision of Land**

Any subdivision of land within the project will require either a parcel map or tentative subdivision map/final subdivision map. It is the intent of the Master Developer to subdivide each Phase into more than four primary development parcels, which are intended to be offered for sale for subsequent subdivision and/or development by merchant builders or commercial developers, as applicable. The primary development parcels, which are created by the first subdivision of land within a Phase into more than four parcels are referred to herein as "Super Pad Parcels." It is anticipated that Super Pad Parcels will be created through sequential parcel maps, and subsequently subdivided and developed through normal parcel map, tentative subdivision map/final subdivision map procedures, as described below.

## **Subdivision into Super Pads**

Each phase of development within the PUD may be subdivided into more than four Super Pad Parcels utilizing a sequential series of two or more parcel maps, which may be submitted and approved concurrently. The Administrator shall review each sequential parcel map and provide a recommendation to the Planning Commission, and the Planning Commission is authorized to issue a final decision on the sequential parcel maps. When issuing a decision on a sequential parcel map, the Planning Commission shall review the parcel maps in accordance with NRS 278.464 and consistent with the criteria for reviewing tentative subdivision maps in accordance with NRS 278.349(3), as applicable, including the issuance of conditions of approval.

Prior to submittal of the first application for a Super Pad Parcel Map, the Master Developer and staff will agree to an efficient process for submittal and staff review of Super Pad Parcel Map applications, including defraying any necessary additional costs attributable to extraordinary staff review required for Super Pad Parcel Map submittals.

Each application for the initial division of land into Super Pad Parcels through a sequential series of parcel maps shall include the following information to enable review by the Planning Commission:

- 1) Each application shall include all land within the phase of development in which the Super Pad Parcels are to be created.
- 2) Each application shall be accompanied by a concurrent application for a special use permit for disturbance of a major drainageway (or any other entitlement as deemed required) for the relevant phase of development, if applicable.
- 3) Each application shall identify common area parcels, access and utility easements, and proposed Master Developer roadway dedication parcels for the subject phase of development.
- 4) Each application shall include the documents and information set forth in the City of Reno Tentative Map checklist, plus a 24" x 36" display map showing all proposed sequential parcel maps in the Phase.

## **Subdivision of Super Pads**

It is anticipated that the individual lot layouts for each Super Pad Parcel will be processed by merchant home builders or commercial developers, as applicable. Subsequent subdivision of any Super Pad Parcel shall be reviewed and processed in accordance with the normal parcel map and/or tentative subdivision map and final subdivision map processes, in accordance with NRS Chapter 278 and City of Reno code, as applicable.

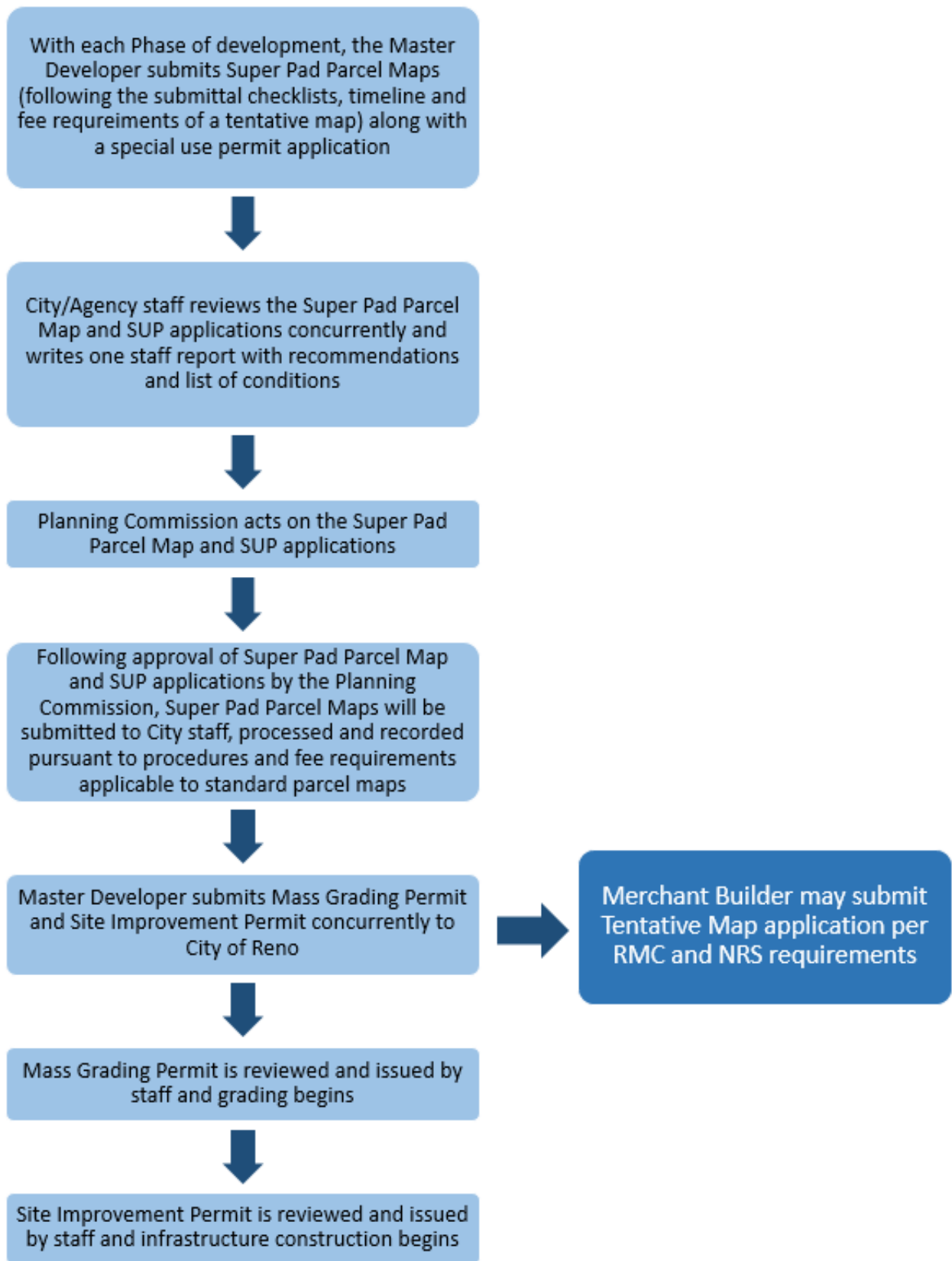
Below is an outline differentiating the typical process and responsibilities of the Master Developer and Merchant Builder.

### **Submittal Process for Master Infrastructure Improvements**

For each Phase, the Master Developer will apply for a special use permit for disturbance of a major drainageway (or any other entitlement, as required) concurrently with the sequential parcel map applications for Super Pad Parcels. Following approval of those two or more applications, Master Developer may submit for approval of a mass grading permit for the Phase, and concurrently shall submit for approval of the Site Improvement Permit, including major utilities and roadways. A subdivision improvement agreement and security shall be required from the Master Developer consistent with RMC Section 18.14.301-305, Improvement Agreements and Security, as amended, for construction of public improvements identified in the approved Site Improvement Permit for each Phase, ~~as amended~~.

At any time after recordation of the sequential parcel maps creating the Super Pad Parcels, the owner of a Super Pad Parcel may submit an application for a tentative subdivision map, final subdivision map(s), and other necessary entitlements for development of the Super Pad Parcel. No certificate of occupancy may be issued for any residence or commercial building within a Super Pad Parcel until all required infrastructure improvements (streets and utilities) shown on the plans of record necessary for that Super Pad Parcel to stand on its own and meet the requirements in RMC Section 18.14.203(d), Completion of Improvements in Phased Projects, as amended, are constructed and completed, ~~as amended~~.

The sequence for submittals and approvals is shown below (Figure 4 – Master Developer and Residential Developer Process Flow Chart ~~Submittal Process Flow Chart~~):



**FiFigure 4: Master Developer and Residential Developer Submittal Process Flow Chart**



### **Master Developer Preliminary Submittal Process**

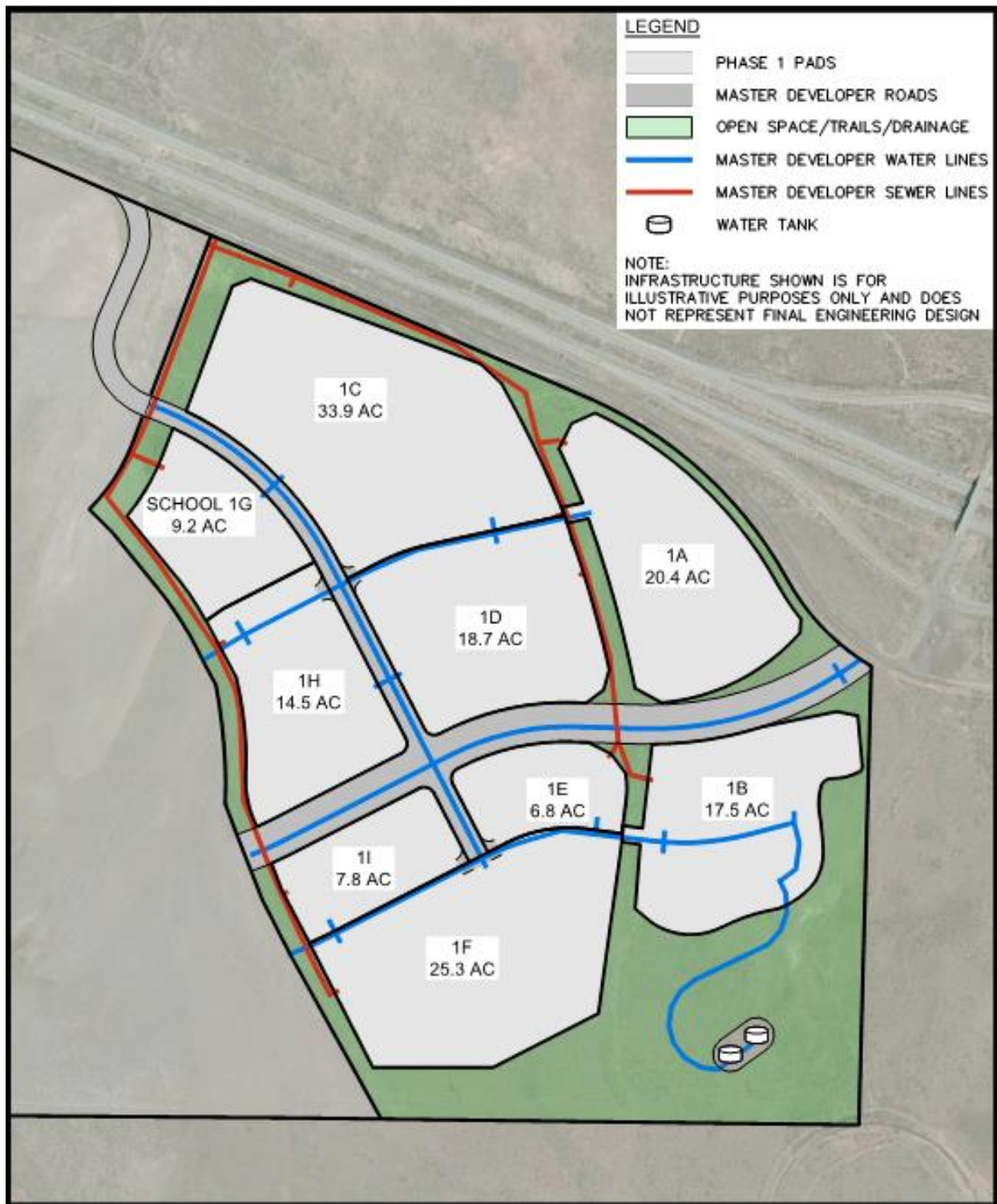
The following shall be submitted to the City of Reno for each Phase:

- 1) Sequential series of parcel maps
  - a) Creation of Super Pad Parcels that can be sold to merchant builders once recorded.
  - b) Access and utility easements will be created in the location of future right-of-way.
  - c) Common Open Space parcels will be created.
  - d) Additional easements (PUE, drainage, etc.) will be created, where necessary.
- 2) Special Use Permit
  - a) A special use permit for disturbance of a major drainageway (or any other entitlement, as required) shall be required for each phase and subject to the Major Drainageway Design Standards, as outlined in this PUD. The application will also identify any associated wetlands.

### **Master Developer Final Submittal Process**

Once the parcel maps on Super Pad Parcels have been recorded and special use permits have been approved for each phase, the Master Developer shall concurrently submit a grading and site improvement permit (for major infrastructure and roadways) for the phase as follows (Refer to Figure 5 – Typical Master Developer Parcel Configuration):

- 1) Master Grading Infrastructure Improvement Plans shall include:
  - a) A separate grading permit that is a standalone application for mass grading and excludes utilities and roadways may be submitted. This shall include the City of Reno grading permit checklist requirements. Grading permits shall comply with Community Development Management Policy and Procedures – Subdivision Grading Only Permits 4005, as amended, and shall be subject to the design standards within the PUD.
    - i) Any request to grade areas, which are outside the lands in an approved special use permit for drainageway disturbance (or other entitlements, as required) must be justified in a letter supporting the request for additional area to be included in the grading permit. Potential reasons for including additional areas may include balancing the project site, access and proper drainage of the site, and stockpiling of materials used to balance the overall project grading.
  - b) A separate site improvement permit shall be submitted to the City, either concurrently or prior to the mass grading permit. These improvement plans will be the construction documents for the master infrastructure, including major roads, backbone utilities, and major drainageways.
  - c) The Master Infrastructure Improvement Plans will be supported by final reports including, but not limited to a geotechnical report, traffic study, drainage study, sewer report, water supply, and conveyance study, as required per Reno Municipal Code, as amended.
- 2) A Dedication Tract Map for all public rights-of-way shall be submitted, but will not be accepted for dedication by the Reno City Council until the completion of all roads within the entire phase.



**Figure 5: Typical Master Developer Parcel Configuration**

### **Development of Super Pad Parcels**

Plans to develop a Super Pad Parcel will need to comply with applicable parcel map, tentative subdivision map and final subdivision map submittal requirements, as applicable, including preparing design drawings that detail specific unit counts, internal roadway networks (other than arterial and collector roadways), and all utility points of connection to each Super Pad Parcel. Each Super Pad Parcel owner will process their respective development in accordance with NRS 278.

### **d. Appeals**

The applicant or Master Developer may appeal any decision, comments, or recommendations of the Zoning Administrator in accordance with RMC Section 18.06.208, Appeals, as amended.

### **e. Conflicts**

In the event of a conflict between the PUD design standards and City Code, these PUD standards shall govern development of StoneGate. When a specific standard is not addressed by the PUD, then the applicable section of Reno Municipal Code Title 18, as amended, at the time of review shall prevail.

### **f. Flexibility**

The Land Use Plan and Development Standards contained herein are intended to depict the general development vision for the PUD. Sufficient flexibility shall be allowed to permit detailed planning and design at the time of actual development. The acreage of each land use category may be increased by up to ten percent if it is demonstrated that additional acreages are necessary due to constraints and/or design considerations to accommodate the project, to the approval of the Zoning Administrator. This provision shall not exceed a cumulative total of ten percent for each land use category. Changes in excess of ten percent shall require an amendment to the Development Standards Handbook.

Transfer of units are allowed from Phase 4 to Phases 1, 2, 3, 5, and the Town Center. In addition, units from Phases 1, 2, 3, and 5 may be transferred to the Town Center. At no time shall the transfer of units be allowed from the Town Center into Phases 1 through 5. Transfer of units may only be allowed into Phase 4, upon approval of an amendment to the Development Standards Handbook.

Residential dwelling unit allocations are interchangeable between phases, if approved by the Zoning Administrator, and will be defined fully with each applicable parcel map, tentative map or final map process. With each tentative map application, the Master Developer and/or applicant shall provide an accounting of the overall residential unit allocations approved to date, and the location of the units. The total number of residential units shall not exceed 5,000 units.

The Zoning Administrator shall have the ability to grant minor deviations as outlined in RMC Section 18.06.411(a)(1), Minor Deviations from Code Requirements, as amended, subject to the Master Developer's written approval prior to submission to the City of Reno. Deviations or variances not falling within the above referenced procedures shall require an amendment to the PUD Handbook.

## g. StoneGate Residential Construction Tax

Residential Construction Tax (RCT) will be imposed and collected within the PUD in accordance with RMC Section 18.14.406, Park Land Dedication Exception, as amended, and as approved through a Parks and Open Space Agreement by Reno City Council. A minimum of 50 acres are identified for parks and trail systems within the Project. Parks and trail systems will be available for use by the public and are anticipated to be privately maintained and operated.

~~RCT funds and/or credits may be utilized for construction of parks and/or trail systems provided a separate agreement is entered into with the City of Reno Parks Department and Master Developer before the elements subject to reimbursement are constructed. A parks construction and maintenance agreement shall be approved by Reno City Council and shall address the following:~~

- ~~• To qualify for RCT reimbursement, facilities and features must be available to all Reno residents.~~
- ~~• At the time the Master Developer submits for grading and a site improvement permit to the City, a breakdown of estimated costs for the applicable parks, trails, and trailheads shall be provided. Park amenities will be identified at the time each tentative map or special use permit is submitted to the City.~~
- ~~• The RCT credit may be used for: designated community parks, community wide trails, neighborhood trails, trailheads, outdoor recreational facilities, features at the Community Center and community parks, and outdoor public areas. At a minimum, construction of parks and trails will be phased in accordance with Figure 3 - Conceptual Development Phasing. StoneGate has identified 50 acres of park land and more than eight miles of trails within the Open Space.~~
- ~~• The Master Developer shall present the parks plan to the City's Recreation and Parks Commission for review and comment prior to approval of the site plan improvement permit, coinciding with the Phase in which the park elements are located.~~
- ~~• Outdoor public art shall equal not less than two percent of total construction costs of reimbursable RCT projects. Smaller public art or sculptures may be dispersed throughout the community or consolidated at one of the community parks.~~
- ~~• The City's Arts and Culture Commission shall approve all public art prior to construction/installation.~~



### III. SERVICES AND FACILITIES

#### a. Traffic and Circulation

The StoneGate PUD includes a hierarchy of streets that consists of a primary arterial parkway, collector streets, neat streets, and local streets (refer to street section starting on page 801). The streets are intended to provide access between neighborhoods and facilitate bike and pedestrian connections to the trail corridors and open spaces.

##### Overall Circulation

StoneGate is estimated to generate 60,554 total daily trips, 6,020 total AM peak hour trips, and 5,925 total PM peak our trips. The total includes internal trips, pass-by trips, diverted trips, and external trips. After accounting for internal capture, pass-by and diverted trips, the project is estimated to generate 40,072 external daily trips, 3,572 external AM peak hour trips, and 3,847 external PM peak hour trips.

Standards for intersection configurations, roadway sizing, and improvements necessary for the safe and efficient management of project traffic are discussed in the 2017 Traffic Impact Study for StoneGate PUD (Appendix F of this PUD Handbook).

##### Vehicle Access Points:

Multiple points of access will be provided as follows (Refer to Figure 7 – Conceptual Roadway Phasing):

- StoneGate Parkway (Primary Access)
- Frontage Road west of the project (Secondary Access)
- Potential Emergency Access/Future Development Access at the southwest corner of the PUD
- Potential Emergency Access/Future Development Access points at the west side of the PUD
- Railroad crossings
  - The existing railroad undercrossing located in the south central portion of the project will be reconstructed to provide access to the south portion of the site and shall be permitted through Union Pacific Rail Road (UPRR) at the time of the first tentative map within Phase 4.

##### Interchange Improvements

With full build-out of the project, the White Lake Parkway/U.S. 395 interchange is proposed to be upgraded by the Master Developer from its current configuration (traditional diamond interchange) to a Diverging Diamond Interchange (DDI), or other acceptable alternatives. In addition, the Master Developer also proposes to widen White Lake Parkway between the ramp intersections to a five-lane roadway by constructing a new three-lane bridge to provide additional capacity. The Master Developer also proposes to improve the capacity of the ramp approaches by adding additional turn pockets and receiving lanes on White Lake Parkway. Improvements to widen White Lake Parkway will be constructed and financed by the Master Developer

**White Lake Parkway/U.S. 395 Interchange:** At full build-out, this interchange will be upgraded by the Master Developer to a DDI with three southbound lanes and two northbound lanes on the White Lake Parkway bridge structures.

**White Lake Parkway/U.S. 395 SB Ramps:** At full build-out, this will be upgraded by the

Master Developer to a signalized intersection (south portion of DDI). The northbound White Lake Parkway approach proposes two through lanes and one free right lane. The southbound White Lake Parkway approach proposes one left turn lane, one shared-through left lane, and one through lane. The U.S. 395 SB off-ramp approach proposes one left-turn lane and one right-turn lane.

White Lake Parkway/U.S. 395 NB Ramps: At full build-out, this will be upgraded by the Master Developer to a signalized intersection (north portion of DDI). The northbound White Lake Parkway approach proposes one shared-through left lane and one through lane. The southbound White Lake Parkway approach proposes one right-turn lane and two through lanes. The U.S. 395 NB off-ramp approach proposes two left-turn lanes and one free right-turn lane.

StoneGate Parkway/N. Virginia Street: At full build-out, this intersection is proposed to be converted by the Master Developer to a side-street STOP controlled intersection with right-in, right-out, and left-in movements to/from N. Virginia Street east of StoneGate Parkway. The west leg will be removed with the frontage road realignment. The intersection will be located as far south as possible to maximize spacing from the interchange. The final intersection configuration is subject to NDOT and City of Reno approval.

The existing frontage road located south of U.S. 395, located adjacent to StoneGate's property line, will be removed in two phases. This will mitigate flooding and eliminate an intersection located too close to the freeway interchange ramp. Traffic using the frontage road will be rerouted through the StoneGate Parkway roundabout with construction of Phases 1 and 2, as shown on Figure 7 – Conceptual Roadway Phasing. A new maintenance road will be constructed along the south side to provide access for landscaping and drainage facilities. The final relocation is subject to NDOT and City of Reno approval.

Prior to issuance of any permits associated with Phase 1, the Master Developer shall have plans approved by Nevada Department of Transportation (NDOT) and the City of Reno Community Development Department that include a phasing plan for the realignment and relocation of the frontage roadway. The phasing plan shall provide for continuous circulation through and connectivity between the interchange at White Lake Parkway and properties located to the north of Phase 5.

Prior to approval of each tentative map or nonresidential building permit, as applicable, the Master Developer shall provide a trip generation letter which includes all previously approved development associated with the PUD to verify the traffic impact is within the envelope provided in the PUD's Traffic Impact Study. If the trip generation letter indicates that the trips exceed the anticipated levels, the Master Developer shall amend the PUD.

Prior to the issuance of the first site improvement permit, the applicant shall have finalized a maintenance agreement or Memorandum of Understanding (MOU), as applicable between the developer, City of Reno, and the Nevada Department of Transportation (NDOT) to address hydraulic design, traffic access management, and roadway abandonment within the NDOT right-of-way.

Prior to approval of the site improvement permit associated with the commercial sites within the Town Center development, the applicant shall provide a traffic report update to identify entry and access requirements and recommended roadway improvements per the Public

Works Design Manual. All improvements shall meet City of Reno and Regional Transportation Commission (RTC) level of service (LOS) standards.

Prior to approval of each phased site improvement permit or final map, as applicable, the applicant shall provide verification that White Lake Parkway interchange (a moderate access control arterial) capacity and policy level of service (LOS), as determined by NDOT and RTC, ~~D~~on White Lake Parkway is met. If capacity and policy LOS are not met, the Master Developer must apply for additional improvements to mitigate, which may require a PUD amendment.

At current market absorption rates, it would take approximately 20 years for the project to be fully built and occupied. Hence, the capacity of the transportation network should also be improved/increased in incremental phases. Roadway and intersection improvements should be built in stages in accordance with the amount of traffic generated by the project through those various phases.

The amount of traffic actually generated by the development will be monitored by installing permanent traffic counter loops, or other counting devices, at the project entrance, and also regularly monitoring traffic operations at the north side access intersections.

#### **StoneGate Concurrency Requirements**

Upon submittal of the first tentative map application (excluding applications for Super Pad Parcel Maps) in the earlier of either Phase 1, Phase 2 or the Town Center, the applicant shall demonstrate that a Notice to Proceed has been issued by NDOT for the construction contracts for the following two projects:

- 1) U.S. 395 Freeway Management/ITS Project
- 2) Additional lane on southbound U.S. 395 between Parr Blvd. and McCarran Blvd.

Upon the submittal of the first tentative map application (excluding applications for Super Pad Parcel Maps) for the earlier of either Phase 3, Phase 4 or Phase 5, the applicant shall demonstrate that a Notice to Proceed has been issued by NDOT for a construction contract on the first phase of the I-80/I-580 interchange project (i.e. Spaghetti Bowl).

The following roadway improvements shall be constructed by the Master Developer at the frequency identified in the table below:

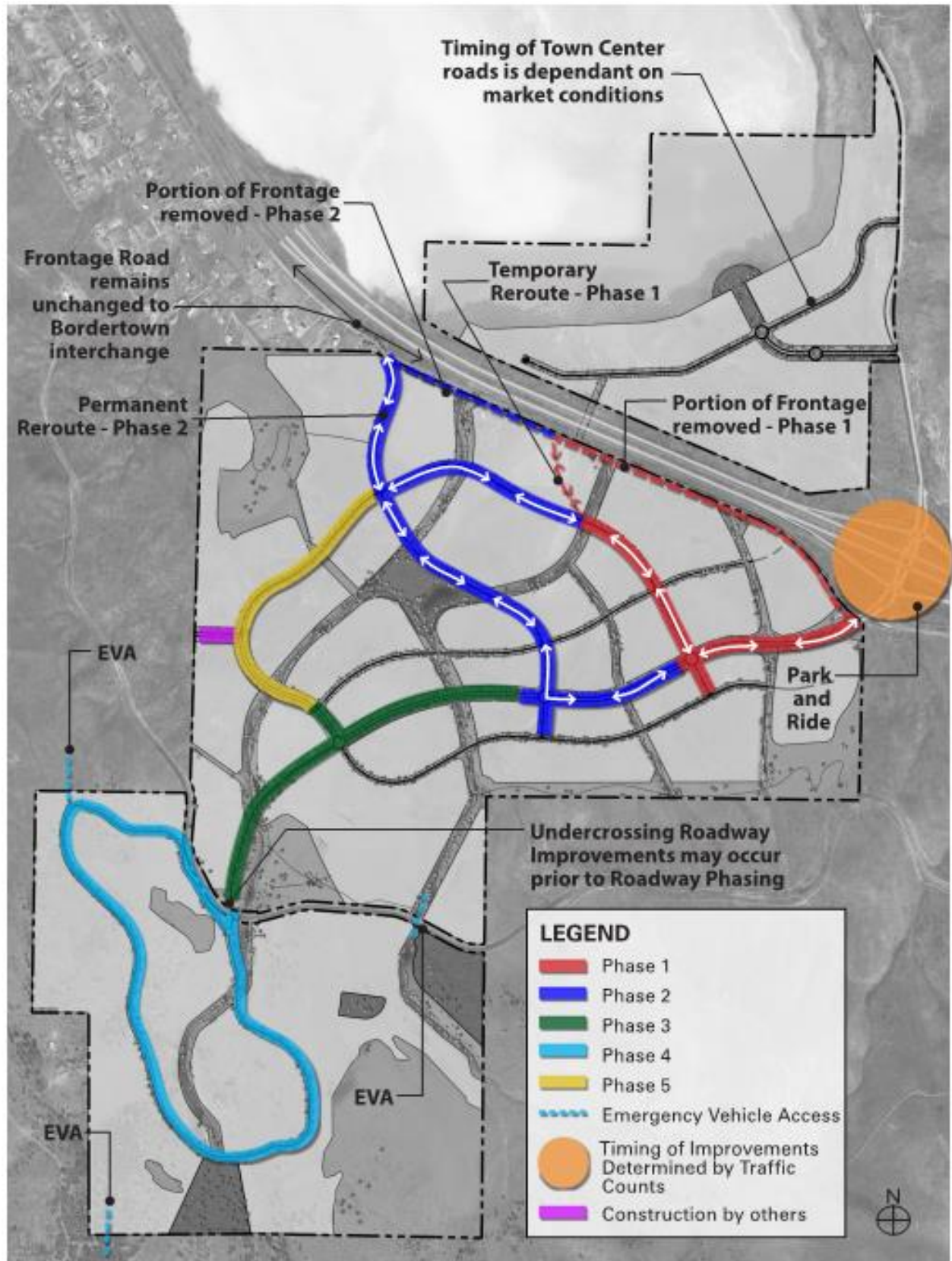
**Figure 6: Roadway Improvement Phasing Table**

Threshold	Trigger	Improvements
0 to 375 PM Peak Hour External Trips		No Improvements Needed
The project reaches <u>375 PM Peak Hour</u> external trips	Trigger 1	Add a left-turn lane on the US 395 NB Off-Ramp approach at the White Lake Parkway/US 395 NB Ramps intersection. Add a channelized free right-turn pocket on White Lake Parkway approaching the US 395 SB Ramps. Widen and lengthen the southbound on-ramp for two lanes and merge length.
Prior to exceeding LOS "D"	Trigger 2	Construct additional through lanes and turn lanes at White Lake Parkway/North Road 1, White Lake Parkway/North Road 2, and White Lake Parkway/North Road 3 intersections.
When signal warrants are met, and Prior to exceeding LOS "D" with STOP Control	Trigger 3	Signalize US 395 Northbound and Southbound Ramp Terminal Intersections. Signalize White Lake Parkway/North Road 1. Signalize White Lake Parkway/North Road 2.
Prior to exceeding LOS "D" at the interchange	Trigger 4	Widen White Lake Parkway between the ramps to 5 lanes, including an additional overpass structure. Construct Diverging Diamond Interchange. Widen both the southbound on-ramp and northbound off-ramp to two lanes to US 395.

### Potential Future Access

Access to adjacent property will be based upon mutually agreed upon access locations and cost-sharing agreements between the two adjacent property owners and will be provided at the time of tentative map submittal when adjacent to the neighboring property. Revisions to the street types by the Master Developer will be permitted at the time of each applicable tentative map or Super Pad parcel map application, based on a traffic study and conformance with the StoneGate PUD street design standards, together with all other PUD design standards.





**Figure 7: Conceptual Roadway Phasing**

## b. Water

~~The StoneGate project is adjacent to, but not within the service area of two different water service providers: Truckee Meadows Water Authority (TMWA) and Great Basin Water Company (GBWC). StoneGate will be annexed into the Great Basin Water Company network prior to the approval of the first tentative map in Phase 1, with documentation of the water company having sufficient water supply available to supply water to the first tentative map.~~

Water supply for the StoneGate development will be provided by TMWA. Connections to the TMWA system will require construction of a new off-site water transmission main by the Master Developer, approximately 6 miles in length. The new water main will be constructed parallel to U.S. 395, within the existing right-of-way fronting North Virginia Street (Refer to Figure 8 – Off-Site Water Improvements). ~~Other potential sources of water supply to supplement the TMWA connection include a connection to the existing GBWC Cold Springs System and on-site well fields. A connection between the TMWA supply and these potential resources will provide redundancy to the StoneGate system.~~

The StoneGate development anticipates water service will be made available to the project through a conjunctive supply provided by ~~a combination of wholesale and retail water service from the~~ Truckee Meadows Water Authority water system and the StoneGate well systems. ~~and Great Basin Water Company.~~ Water supply may include conversion, dedication, and use of the applicant's verified (by the State Engineer's Office) irrigation water resources associated with historic ranching operations. At a minimum, the Master Developer will install and receive water service through the TMWA pipeline, which has been designed with sufficient capacity to serve the anticipated build out of the project in the event conjunctive or other water resources do not become available as intended.

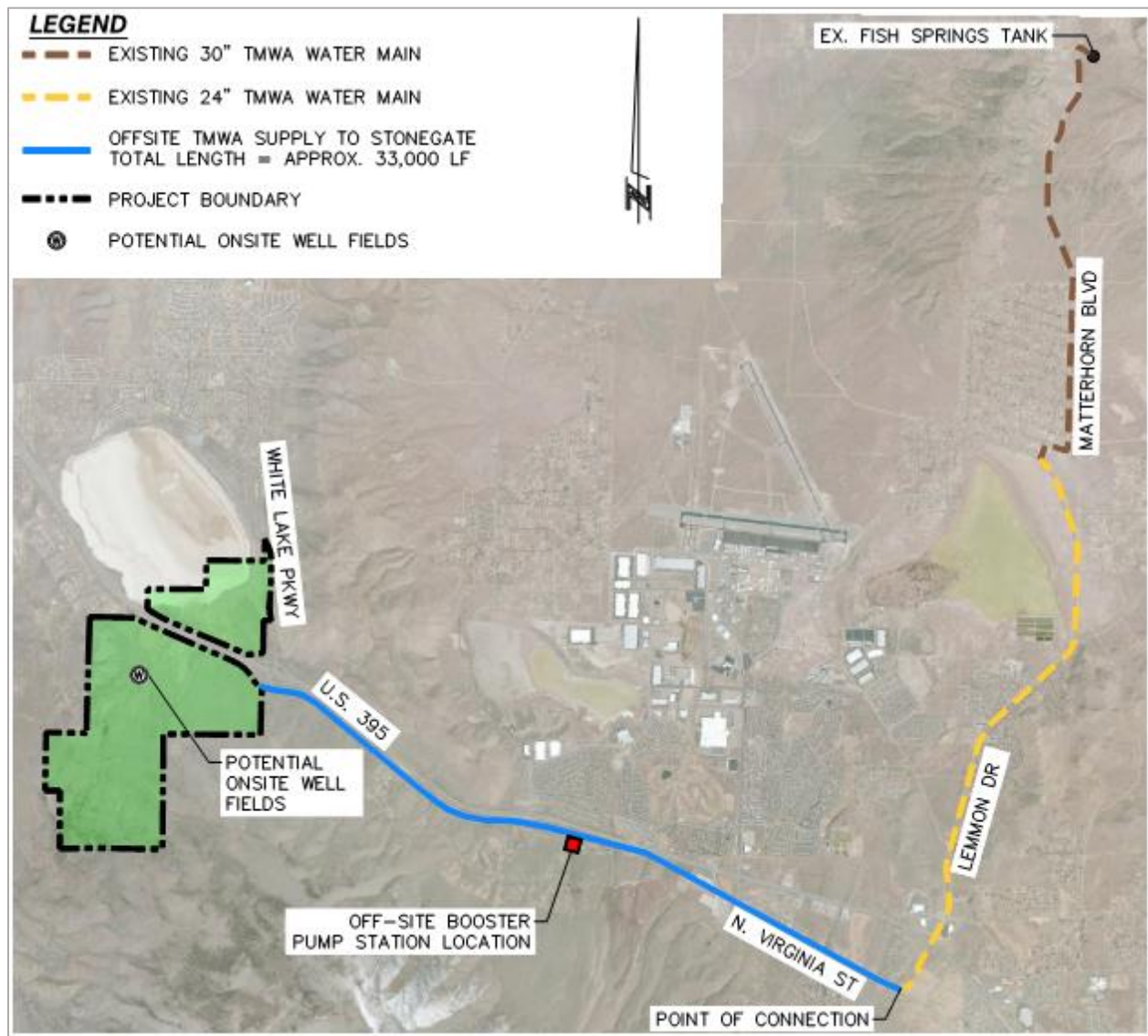
On-site water mains will feed storage tanks located at strategic points throughout the project site. Water service to customers in the PUD will be delivered via a system of water mains, smaller booster stations, and pressure reducing valves. The location of storage tanks shall be determined with approval of each tentative map or special use permit, as applicable, and constructed prior to issuance of the first Certificate of Occupancy associated with the development requiring that storage tank. A conceptual water report is provided in Appendix D of this PUD Handbook.

Prior to approval of each final map and the first Certificate of Occupancy within a final map, as applicable under City code and water purveyor requirements, the applicant shall demonstrate satisfaction of water purveyor requirements for issuance of a will serve commitment or equivalent and construction of on and off-site water facility improvements in accordance with the timing, rules, and regulations of water purveyor(s) providing water service.

Prior to the approval of each site improvement permit or final map, as applicable, the Master Developer shall finalize a water service agreement with the requisite water purveyor. All proposed water supply infrastructure shall be designed and constructed to meet TMWA standards. A reliable water source shall be available on-site prior to the issuance of any building permit (for fire suppression and dust control). All required off-site water line improvements necessary to serve the project shall be complete and functional prior to the first Certificate of Occupancy, unless deemed necessary for fire suppression activities. All required on-site water line improvements necessary to serve lots in a final map shall be complete and functional prior to the issuance of the first Certificate of Occupancy within such

map.

The Master Developer shall be responsible for obtaining all necessary approvals and construction of all necessary on and off-site backbone water infrastructure prior to issuance of the first Certificate of Occupancy for each phase.



**Figure 8: Off-Site Water Improvements**

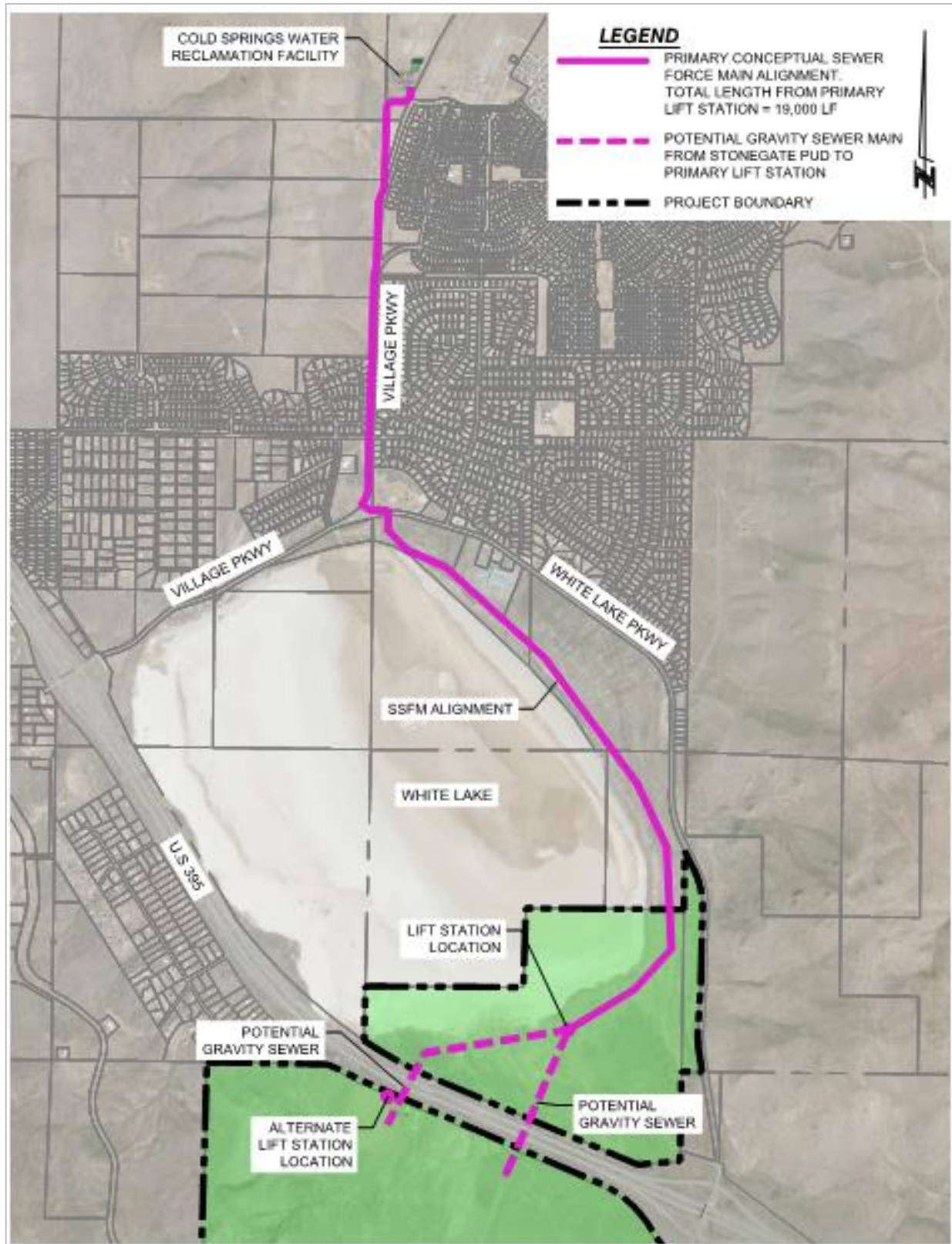
### **c. Sanitary Sewer Service**

Prior to the approval of the issuance of any building permit, the applicant shall have finalized a Memorandum of Understanding (MOU) between the City of Reno and Washoe County Department of Water Resources (WCDWR) to develop a joint agreement to provide sewer service through the existing Cold Spring Water Reclamation Facility (CSWRF). Washoe County Department of Water Resources will collect fees and treat the waste water generated by the StoneGate project. The terms of the joint agreement between the two agencies will be outlined in a Memorandum of Understanding prior to approval of the first special use permit or tentative map, as applicable. Sewer generated from StoneGate will be collected by an on-site gravity flow sewer network, and conveyed to a lift station facility located within the Town Center. An alternative lift station located near the northern property line of the master planned community may also be utilized, if gravity sewer is not available across U.S. 395. Waste water generated by StoneGate will be treated at the Washoe County Cold Springs Water Reclamation Facility located approximately four miles north of StoneGate. This will require approval of an interlocal agreement between the City of Reno and Washoe County to expand the facility. A conceptual sewer report is provided in Appendix C of this PUD Handbook.

All required on-site and off-site sanitary sewer improvements necessary to serve the project shall be complete and functional prior to the issuance of any Certificate of Occupancy. Adequate public sanitary sewer easements and maintenance accesses shall be provided for all sanitary sewer improvements per the Public Works Design Manual. The applicant shall provide a technical sewer report with each site improvement permit or final map, as applicable, to verify adequate design capacity for all proposed sewer facilities and to demonstrate compliance with Washoe County sanitary sewer design standards.

**The Master Developer shall be responsible for obtaining all necessary approvals and construction of all necessary on and off-site backbone sewer infrastructure prior to issuance of the first Certificate of Occupancy for each phase.**





**Figure 9: Off-Site Sewer Improvements**

#### d. Reclaimed Water

Subject to availability and determined at the sole discretion of the Washoe County Utility Division, reclaimed water shall be provided by the Washoe County Utility Division from the Cold Springs Water Reclamation Facility (CSWRF). The reclaimed water pipeline from CSWRF to StoneGate shall follow the same general four-mile corridor as the off-site sanitary sewer force main from the Project to CSWRF. Reclaimed water, or other sustainable alternative water resource as agreed upon by TMWA and the Washoe County Utility Division, shall be used for the irrigation of landscaping within parks, rights-of-way, common areas and/or such other uses, as permitted.

Prior to the approval of the first site improvement permit in Phase I, the Master Developer shall provide the Zoning Administrator with an Agreement, or other suitable form of commitment between the Master Developer, Washoe County Utility Division and TMWA regarding how a reclaimed water demonstration program will be implemented and constructed, providing for a sustainable alternative water resource.

~~Upon approval, reclaimed water (treated effluent) will be provided by the Washoe County Department of Water Resources from the Cold Springs Water Reclamation Facility (CSWRF). The reclaimed water line from CSWRF to StoneGate will follow the same general four-mile corridor of the off-site sanitary sewer force main that conveys waste water from the project to CSWRF. The availability of reclaimed water will be determined at the sole discretion of the Washoe County Engineer.~~

~~In the event that reclaimed water is made available before the first final map in Phase 2, the following shall apply: 1) reclaimed water (treated effluent) shall be used for irrigation of landscaping within common areas, parks and rights-of-way; 2) the applicant shall provide a technical reclaimed water report with each site improvement permit and final map, as applicable, to verify adequate design capacity for all proposed reclaimed water facilities and to demonstrate compliance with Washoe County reclaimed water design standards; 3) adequate public reclaimed water easements and maintenance accesses shall be provided for all reclaimed water improvements per the Public Works Design Manual. StoneGate will use reclaimed effluent to the maximum extent possible, subject to obtaining all necessary government approvals (i.e. Washoe County and Nevada Division of Environmental Protection (NDEP)).~~

**The Master Developer shall be responsible for obtaining all necessary governmental approvals and construction of all necessary on and off-site backbone reclaimed water (treated effluent) infrastructure prior to issuance of the first Certificate of Occupancy for each phase.** ~~In the event reclaimed water does not become available until after the first final map in Phase 2, reclaimed water will be used at the Master Developer's discretion.~~

#### e. Hydrology

Currently, storm flows run south to north through StoneGate to White Lake via existing drainage channels from Peavine Mountain. Existing drainage structures under the frontage road and under U.S. 395, which convey flows to White Lake, are inadequate during major storm events and cause flooding at multiple locations terminating at White Lake.

Development of StoneGate will raise peak flows due to increased impervious surfaces. The design and hydrologic analysis of the proposed community have been conducted in

compliance with the drainage guidelines for the City of Reno. A Conceptual Drainage Report is provided in Appendix C of this PUD Handbook.

StoneGate shall construct adequate structures to detain and convey the increase in flow under U.S. 395, due to development, without increasing the elevation of White Lake to prevent overtopping the freeway in the existing condition. To accommodate the additional drainage volume caused by the StoneGate development, additional flood storage within White Lake will be excavated and constructed by the Master Developer on property owned or controlled by the StoneGate Master Developer during Phase 2, subject to the approved applicable conditions associated with the approved special use permit. This will occur within the boundaries of the StoneGate PUD.

Prior to the approval of any grading or site improvement permit, a FEMA Conditional Letter of Map Revision (CLOMR) shall be prepared and approved to depict the new floodplains contained within the proposed channels and ponds. Prior to the issuance of the first Certificate of Occupancy for any structure located within a FEMA designated floodway or floodplain, the Master Developer shall prepare and obtain approval of a FEMA Letter of Map Revision (LOMR).

Prior to approval of each site improvement permit or final map, as applicable, the Master Developer shall provide a final hydrology study which incorporates analysis of all previous phases of development in addition to the current phase of development, which identifies the required mitigation, if any, to maintain the controlled elevation of White Lake. Prior to the issuance of each permit, the Master Developer shall have approved plans for the disposition of storm waters generated on site up to and including a 100-year frequency storm, including any necessary easements. Volumetric analysis shall be based on the 100-year, ten-day storm event, while routing of peak flows shall be based on the 100-year, 24-hour storm event. Final hydrology must account for both the peak and volume of storm flows generated by the 100-year storm event, and final design shall incorporate measures to assure that there is no net increase in the regulatory 100-year water surface elevation at White Lake.

Prior to the approval of each site improvement permit or final map, as applicable, the Master Developer shall demonstrate the proposed storm water collection, conveyance, and discharge facilities mitigate downstream impacts and meet the City's minimum requirements for erosion control, storm water flow velocities, and energy dissipation. Check dams or equivalent shall be integrated into the design in order to insure grade control of the drainage way. Onsite and offsite detention and retention basins shall be complete and functional prior to the issuance of any Certificate of Occupancy.

Prior to approval of each site improvement permit or final map, as applicable, the Master Developer shall have approved plans providing for access to all public storm drain and sanitary sewer improvements, including manholes, culverts, and storm drain inlets and outlets, in accordance with the Public Works Design Manual. Prior to the issuance of any Certificate of Occupancy, the Master Developer shall grant to the City of Reno a public emergency access easement for the major drainage ways traversing the site as illustrated on the tentative map or special use permit, as applicable, to the satisfaction of staff.

Prior to the issuance of the first site improvement permit, the Master Developer shall provide documentation of the legal placement of deed restrictions, transfer to a common interest community or landscape maintenance association organized under NRS 116, or other legal

document as approved by the City of Reno, on parcels of land intended to be used for volumetric mitigation of storm water flows in accordance with the Truckee Meadows Regional Drainage Manual, or analysis provided pursuant to the final hydrology study. The required area shall be based upon the preliminary hydrology study provided with the PUD Handbook application.

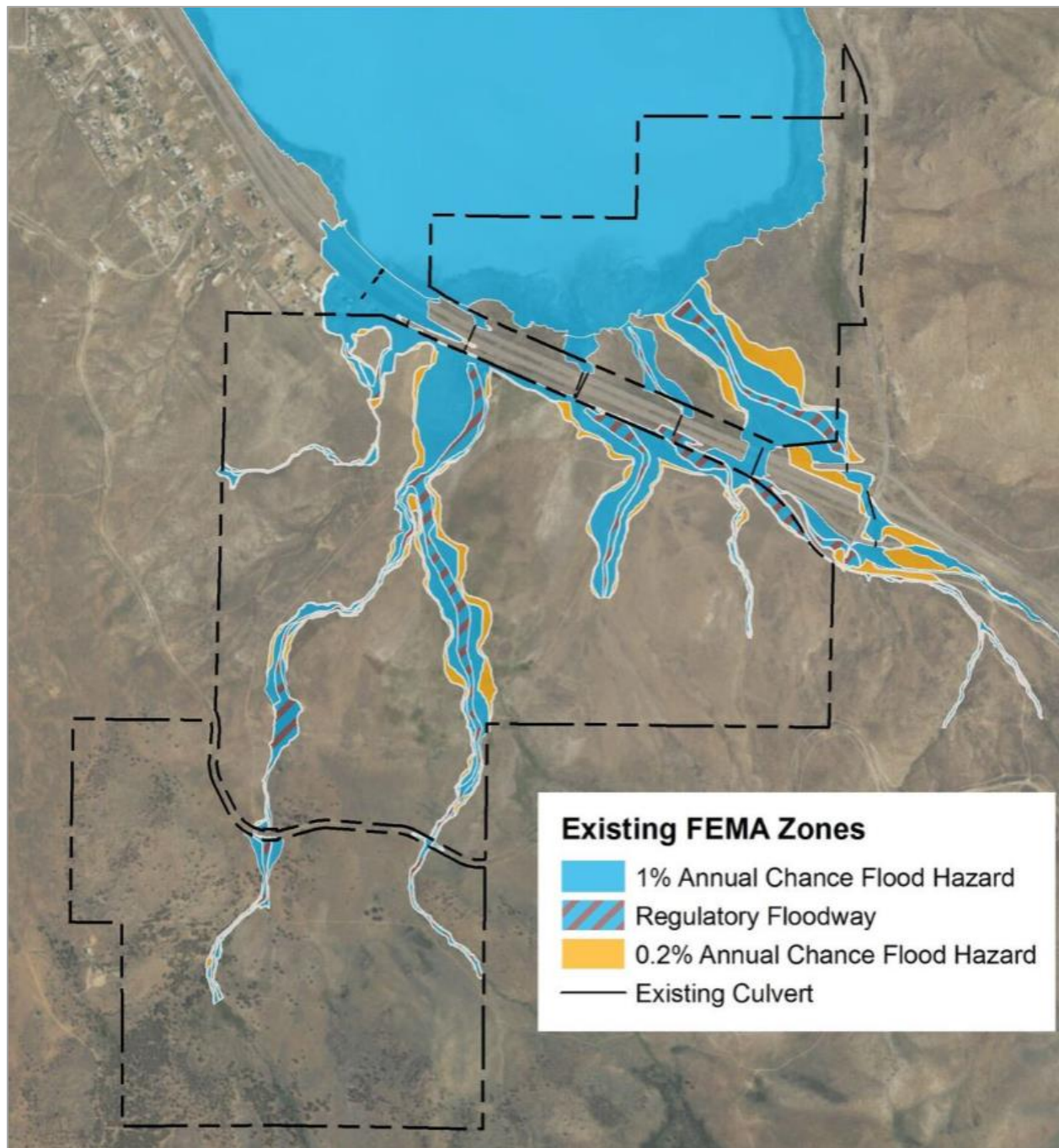
Prior to approval of each phase's hydrology report for the project, the parcels required for volumetric mitigation of storm water flows shall be reviewed to insure that the area is sufficient to provide this mitigation. If any phase's final hydrology report identifies any deficiency of available volumetric mitigation area, the development shall not continue until the deficiency is resolved as approved by the City of Reno Community Development Engineering and Public Works Departments.

Prior to approval of the Phase 5 improvement permit hydrology report, the parcels required for volumetric mitigation of storm water flows shall be reviewed to determine the total project's required area to provide this mitigation. If the previously studied areas are in excess of the area required, the Master Developer may remove that portion of the land from any restriction as approved by City of Reno Community Development Engineering and Public Works Departments.

Prior to the approval of each site improvement permit or building permit, as applicable, which includes any of the existing major drainage ways, the Master Developer shall be required to process a special use permit for disturbance of a major drainage way or avoid the drainage ways with the development. The Master Developer shall also be required to comply with the applicable code section, Chapter 18.12. General Development and Design Standards, Article XIX: Drainage Way Protection Standards, as amended, together with the provisions in the Handbook.

**The Master Developer shall be responsible for obtaining all necessary approvals and construction of all drainage and drainageway improvements.**





**Figure 10: Existing FEMA Zones**



## **f. Fire Service**

Prior to certification of the PUD Handbook, Master Developer will enter a separate agreement with the City of Reno addressing details of a temporary and permanent fire station and a police substation. The PUD Handbook shall be revised to reflect that unless otherwise provided in the agreement to be entered with the City, the following shall apply:

- The Master Developer shall provide for the temporary use of an appropriately modified single family home (“Residential Station”) that will accommodate a two-man public safety crew, police, fire and emergency medical services (EMS) equipment prior to the issuance of a Certificate of Occupancy for the 250<sup>th</sup> residence within StoneGate.
- The Master Developer shall dedicate a site that is a minimum of 2.5 acres in size for a “Permanent Fire Site”.
- The “Permanent Fire Site” shall be located on the south side of U.S. 395, within Phase 1.
- A Permanent Fire Station shall be constructed by the Master Developer, prior to the issuance of a Certificate of Occupancy for the 1,700<sup>th</sup> dwelling unit.
- The Permanent Fire Station shall include a 600-square-foot substation for police services.
- Homes will have sprinklers installed in accordance with and as required by applicable fire code requirements.

## **g. Police Service**

The temporary Residential Station shall also include a minimum of 600 square feet of building area to be used for Police Services. Prior to or concurrent with Reno City Council certification of this PUD Handbook, the Master Developer shall demonstrate such agreement has been approved by City Council.

### **Crime Prevention through Environmental Design (CPTED) Principles**

CPTED principles will be used along trail corridors and common open spaces to contribute to a safe and inclusive community. CPTED Principles will be reviewed during the special use permit or tentative map approval process. Non-residential development shall be reviewed during the building permit process.

- 1) CPTED Principle #1: Develop the opportunity for natural surveillance such as ‘eyes on the street’ to create transparency and a sense of community. Spaces should be visible and landscape should allow for outsiders to see into spaces.
- 2) CPTED Principle #2: Natural access control utilizes the use of walkways, fences, lighting, signage and landscape to clearly guide people and vehicles to and from the proper entrances.
- 3) CPTED Principle #3: Utilize physical designs such as pavement treatments, landscaping and signage that clearly distinguishes public from private.
- 4) CPTED Principle #4: Maintenance and the “Broken Window Theory” suggests that one “broken window” or nuisance, if allowed to exist, will lead to the decline of a space. Maintenance is important to show spaces are cared for and valued.

## **h. Schools**

StoneGate shall enter into an agreement with the Washoe County School District, prior to approval of the first parcel map or tentative map, as applicable, to donate land for two elementary school sites within StoneGate. The location of each suitable site shall be mutually agreed upon by StoneGate and the Washoe County School District; and, shall contain approximately nine acres. Each elementary school site shall be dedicated to the

Washoe County School District, per their agreement.

StoneGate shall enter into a separate agreement with the Washoe County School District for development of a high school located on the north side of U.S. 395. The agreement shall outline the timing of development and size of property to be purchased by the Washoe County School District.

A safe route to school plan shall be submitted and approved by the Washoe County School District, with the approval of each final map.

### **i. Affordable Housing**

A minimum of 200 apartment units shall be set aside for affordable housing prior to approval of the first tentative map within Phase 5. The units shall meet a minimum of 60 percent average medium income (AMI), as determined by the annual publication of the U.S. Department of Housing and Urban Development.

### **j. Sustainable Development Standards**

StoneGate incorporates sustainable development practices throughout the PUD. Sustainable design is implemented as part of the walking/biking pathways provided in every residential development area, Neighborhood Center, Town Center, and school site. Sustainable development is also used in the open channel design and collection of stormwater runoff through bio-swales. Plans demonstrating application of best practices or conformance with adopted standards shall be provided with each tentative map, special use permit, and/or building permit, as applicable. Sustainable development practices include, but are not limited to the following:

- Use of Low Impact Development (LID) standards located outside of the public right-of-way shall be incorporated throughout.
- When LID street sections are used, bio-retention and open swale systems shall be incorporated into landscaping, and located outside of the public right-of-way.
- When LID street sections are used, road and driveway stormwater shall be dispersed to adjacent open space and landscaped areas located outside of the public right-of-way.
- When LID street sections are used, drainage shall be conveyed into open swales located outside of the public right-of-way, rather than in closed conduits.
- Roadway medians, bulb-outs, cul-de-sacs, and roadside swales shall be used to limit continuous flow paths over impervious surfaces.
- Hardscape shall be minimized by including sidewalks on one side of the street only and/or constructing sidewalks using pervious materials.
- Pedestrian and bicycle path connections shall be constructed to encourage walking and cycling and increasing access without adding significant impervious areas.
- Alternative designs to curb and gutters located in parking lots and in residential zones shall be used, where soils and slopes permit.
- Water efficient plants and landscaping shall be used throughout StoneGate.
- Best Management Practices (BMPs) shall be incorporated during construction.
- All non-residential lighting shall use LED.
- Use of motion sensor lighting shall be incorporated in all non-residential exterior lighting, excluding parking lots or other areas where safety is impacted.
- The Master Developer shall reconstruct a Park and Ride located at the entrance of StoneGate.
- The Community Center building shall be constructed with solar panels.
- Existing building materials, landscape materials, and ranching tools shall be used in the

construction of HOA maintained buildings.

## IV. LAND USE DESIGNATIONS

The table below summarizes the land use categories and densities.

Figure 11: Land Use Development Phasing Table					
Land Use Designation	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Residential Land Uses					
Multi-Family (Units)	30	70	80		200
SF4 (Units)	420	870	650		555
SF6 (Units)	430	285	50		145
LLR-1 (Units)				350	
Total Units Per Phase	880 units	1,225 units	780 units	350 units	900 units
Non-Residential Land Uses					
Neighborhood Center (Acres)	12 acres (maximum building square footage of 80,000 SF)				
Town Center (Acres)	146 acres (maximum of 865 dwelling units)				
Industrial (Acres)	39 acres				
Parks (Acres)	50 acres				
Open Space (Acres)	435 acres				
Right-of-Way (Acres)	120 acres				
Overall Unit Count and Density					
Total Residential Units	5,000 units (includes north and south side parcels)				
Total Acres	1,737 acres				
Density	2.87 du/acre				

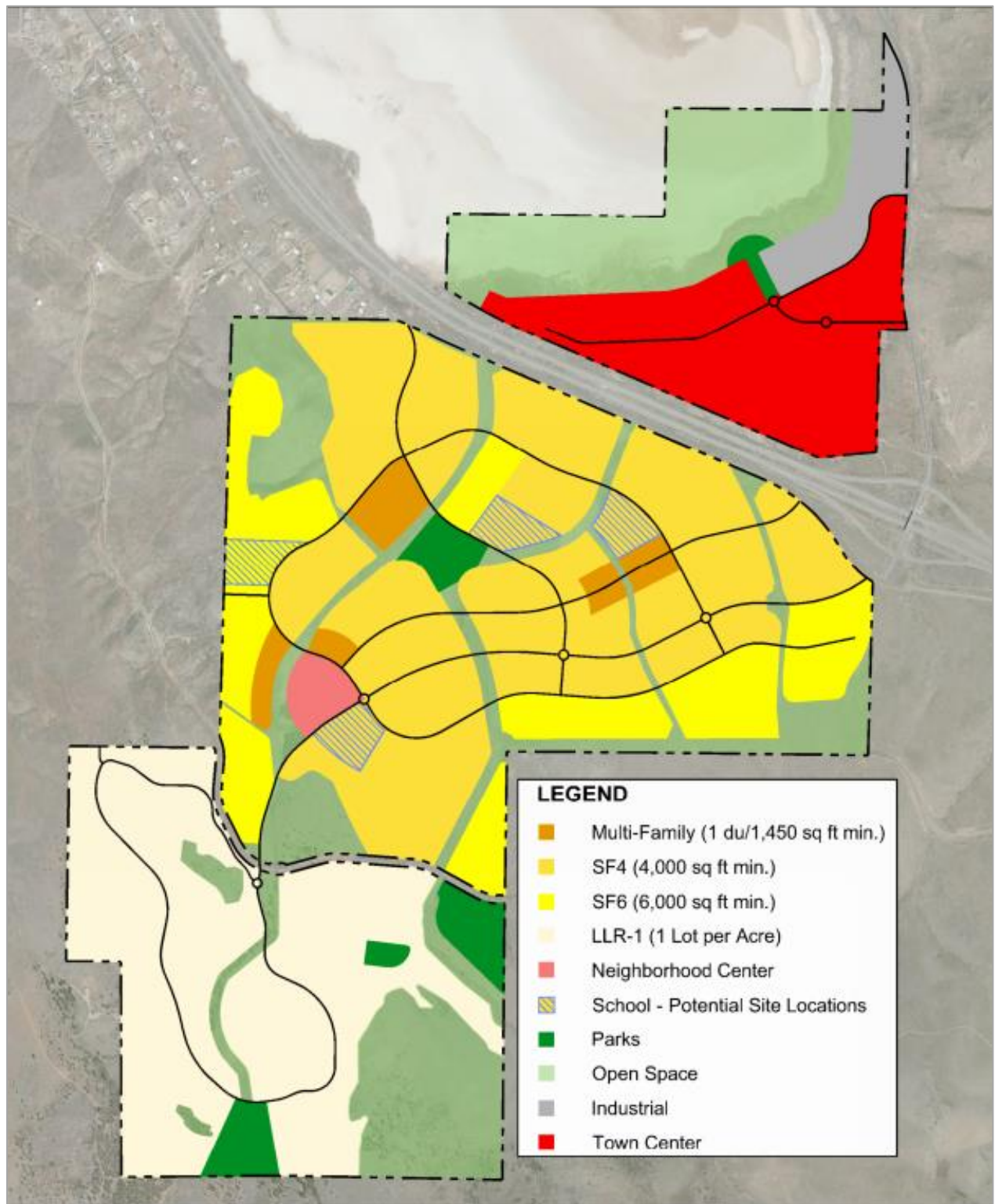
### a. Land Use Designations

#### Multi-Family

The purpose of this designation is to provide for areas of high density where the predominant type of housing is multi-family and attached housing types. This designation allows for a variety of residential land uses with densities between 21 and 30 du/acre, which corresponds with the Urban Residential/Commercial master plan category and densities between 21 du/acre and up to 40 units. These uses include low-rise multi-family, single family attached, and single family detached housing. Examples of development in this designation include townhomes, apartments, small lot single family detached, active senior housing, or an assisted living facility. The maximum residential density allows for one dwelling unit per 1,450 square feet.

#### SF4 Residential

The purpose of this designation is to provide for small lot and clustered single family development with minimum lot sizes of 4,000 square feet. This category corresponds with the Mixed Residential land use category with densities ranging from 3 to 21 dwelling units per acre. Clustered single family development reduces the visual impacts of development by preserving open space. Examples of development in this designation include attached and detached single family residential.



**Figure 12: Land Use Map**



### **SF6 Residential**

The SF6 residential designation allows for residential uses with a minimum lot size of 6,000 square feet. This category corresponds with the Mixed Residential land use category with densities ranging from 3 to 21 dwelling units per acre. This category is generally located along the project perimeter and in pockets mixed in with higher density development. The purpose of this designation is to provide a buffer between multifamily and SF4 designated land and the adjacent properties, located outside of StoneGate.

### **LLR-1 Residential**

This designation allows for single family residential uses with a minimum lot size of one acre. This category corresponds with the Single Family Residential land use category with densities of 3 dwelling units per acre and up. This category is located in Phase 4, which is more site constrained with steep topography, mature trees and environmentally sensitive areas. Many of the lots in this designation are intended for clustered development and custom home sites. Grading and tree removal shall be carefully managed in these areas to maintain the scenic integrity of StoneGate.

### **Neighborhood Center**

This designation is intended for commercial, retail and personal service businesses that are customarily associated with residential development. This category corresponds with the Urban Residential/Commercial master plan category and densities between 21 du/acre and up to 40 units. This also includes commercial activities. This category allows for up to 80,000 square feet of non-residential uses. The Neighborhood Center also includes the StoneGate Community Center, which includes amenities such as a pool, community garden area, and outdoor amphitheater. The Neighborhood Center allows residents of StoneGate to work, shop, and socialize within close proximity to their neighborhood. This area is located in the center of the StoneGate with trail connections and vehicular access from primary trail and road networks.



**Figure 13: Neighborhood Center Concept Images**



### **Town Center**

The Town Center designation is intended for a higher intensity of commercial and service uses and employment that generate large volumes of automobile traffic. This category corresponds with the Urban Residential/Commercial master plan category and densities between 21 du/acre and up to 40 units. This also includes commercial activities. The Town Center designation is located on the north side of U.S. 395, and is intended to serve both the future StoneGate residential development and the existing Cold Springs residential development. The designation allows for multi-family, office, retail, commercial, and public facility uses, including a school and/or fire station.

### **Industrial**

This district provides for a mix of industrial and small-scale commercial land uses. This category is consistent with the Industrial master plan category, which allows for a full range of industrial activity and supporting uses. This may include multiple large buildings or a mix of smaller buildings. This land use category provides an employment generator for StoneGate and the greater North Valleys area.

### **Parks**

StoneGate provides for over 50 acres of public parks plus eight miles of trails. The parks offer a variety of active and passive recreational uses, as required in this PUD. This category corresponds with the Parks/Recreation/Open Space land use designation. The park sites are located in the Town Center and in phases 2 and 4, and are interconnected by the trail network. The parks will be owned and maintained by the StoneGate Homeowners Association (HOA).

### **Open Space**

A minimum of 435 acres (approximately 25 percent) of the site will be preserved as open space. The open space designation protects the drainage corridors and areas with steeper slopes, which provide recreational and scenic opportunities throughout the development. Improvements in these areas will be limited, facilitating recreational activities and infrastructure uses. All common areas and open spaces will be deed restricted, as such, to prevent the encroachment of development into these areas. All common areas and open spaces will be owned and maintained by a master homeowner's association. The open space will include an extensive internal trail system that will encourage bicycle and pedestrian traffic within the community. StoneGate will provide several public trailheads connecting to adjacent public land. These trailheads will include public parking lots and amenities, as outlined in the PUD. This category corresponds with the Parks/Recreation/Open Space land use designation. Trails and/or trailheads will be reviewed at the time of special use permit, tentative map, or site improvement permit application, whichever review is required. **The Master Developer will be responsible for assuring that parks, trails, trailheads, and public access points are constructed and maintained by the HOA.**

## V. DEVELOPMENT STANDARDS

All development standards not addressed in this PUD will be in accordance with the Reno Land Development Code and RMC, as amended. The following section addresses the development standards for the StoneGate land use categories. Addressed within each land use category are the allowed uses, building heights, setbacks, bulk, etc. that will apply to the development of StoneGate. Additional protective covenants may be addressed by separate CC&R document for these areas.

The Setback and Density Requirement Tables (Figures 14 and 15) assigns maximum standards for density and building height and the minimum standards for setbacks, site area, and lot width in the StoneGate PUD. The table shall establish the minimum requirements for these elements.

Reduced lot sizes, reduced lot widths, and zero-foot setbacks may be provided for attached single family, condominium, and townhouse units if: (1) common areas are maintained in a consistent manner by an association, master developer, or similar mechanism; (2) reciprocal parking and access agreements are recorded for use of the common areas; and (3) all other development standards are addressed and met by the larger project. This subsection may be utilized for residential and non-residential developments.

Small lot and cluster development shall conform to development standards of the RMC Section 18.12.101-18.12.102, Bulk/Dimensional, Density and Intensity Standards – General Standards and Standards for Single-Family Residential Base Zoning Districts, as amended.

Zero Lot Line development shall conform to zero lot line development standards of the RMC Section 18.12.102, Standards for Single-Family Residential Base Zoning Districts, as amended.

### **Buffering and Edge Matching**

To preserve the rural character of the area and protect the adjacent properties on the northwest corner of Phase 5, open space buffers shall be required. A minimum 40-foot-wide landscaped buffer is required along the northwest corner of Phase 5, where StoneGate abuts unincorporated Washoe County parcels. This landscape buffer will include street trees planted at a rate of one tree every 30 linear feet in a staggered pattern, plus three shrubs per required tree. Plans for the buffer treatments shall be submitted with the first site improvement permit or tentative map, as applicable, for this land use area.

### **Alturas Power line**

The Alturas 345 KV overhead power line bisects the southern portion of the property, generally following a similar alignment with the railroad and impacting Phase 4 of StoneGate. The Alturas power line has a 160-foot easement, which allows lots and roads to be built within the easement, but prohibits residential structures. This power line runs the entire length of the North Valleys area, in a north/south direction. Development adjacent to the Alturas power line shall follow the standards in RMC Section 18.08.202(e)(13), Major Utilities, as amended. A final lot layout will be reviewed at the time of tentative map.

### **Union Pacific Railroad**

The Union Pacific Railroad line crosses the StoneGate property through Phase 4. While there are no specific building setbacks associated with the railroad, no development is

permitted within the railroad right-of-way, which varies in width and averages 100 feet wide. A specific lot layout will be reviewed at the time of tentative map.

<b>Figure 14: Residential Setbacks and Density Requirements Table</b>				
	LLR-1	SF6	SF4	Multi-Family
Maximum Density	1 du/acre	7.26 du/acre	10.89 du/acre	30 du/acre
Minimum Lot Size	1 acre	6,000 SF	4,000 SF	1,450 SF
Minimum Lot Width				
Corner Lot	120 feet	70 feet	50 feet	30 feet
Interior Lot	120 feet	60 feet	40 feet	30 feet
Minimum Front Yard	30 feet	10 feet	10 feet	10 feet
Porches (front and side)	10 feet	5 feet	5 feet	5 feet
Minimum Side Yard	12 feet	5 feet	5 feet	5 feet
Zero Lot Line Development				10 feet on one side and 0 feet on other
Minimum Rear Yard	30 feet	20 feet	20 feet	10 feet
Maximum Building Height	45 feet	35 feet	30 feet	45 feet
Maximum Structure Height (Non-building features)	45 feet	35 feet	45 feet	45 feet
Minimum Garage or Porte Cochere Setback (Front Setback to Face of Garage)	20 feet	20 feet	20 feet	20 feet

	LLR-1	SF6	SF4	Multi-Family
Minimum Useable Yard/Open Space (SF per Unit)	NA	400 SF	400 SF	100 SF
Maximum slope of usable yard	NA	7:1	7:1	7:1
Minimum Building Separation Between Multi-Family Buildings	NA	NA	NA	20 feet between main buildings on the same lot for developments of 50 units or more and 10 feet for developments less than 50 units.

**Figure 15: Non-Residential Setbacks and Density Requirements Table**

	Parks	Open Space	Neighborhood Center	Town Center	Industrial
Maximum Density	NA	NA	30 du/acre	30 du/acre	NA
Minimum Lot or Development Site Size	NA	NA	NA	NA	NA
Minimum Lot Width	NA	NA	50 feet	50 feet	50 feet
Minimum Front Yard	10 feet	10 feet	10 feet	10 feet	20 feet
Minimum Side Yard	5 feet	5 feet	0 feet or 10 feet (minimum 10 feet if adjacent to residential)	0 feet or 10 feet (minimum of 10 feet if adjacent to residential)	10 feet
Minimum Rear Yard	10 feet	10 feet	0 feet or 10 feet (minimum 10 feet if adjacent to residential)	0 feet or 10 feet (minimum 10 feet if adjacent to residential)	10 feet
Maximum Building Height	45 feet	45 feet	40 feet	65 feet	40 feet
Maximum Structure Height (non-building features)	45 feet	45 feet	40 feet	45 feet	40 feet
Minimum Building Separation	NA	NA	20 feet between main buildings on the same lot for development of 50 units or more and 10 feet for developments less than 50 units.		NA

## **a. Permitted Uses and Use Regulations**

All development standards and procedures not addressed in this PUD will be in accordance with the Reno Land Development Code and RMC, as amended. If there is a conflict between City Code and the StoneGate PUD, the PUD shall prevail. The uses permitted in this section are classified on the basis of common operation characteristics and land use compatibility.

Uses not specifically listed in this section and in the summary use tables below are prohibited. However, additional new and unlisted uses may be permitted by the administrator if it is found that the use is similar to other uses listed and allowed in the same use category. The definition of each use shall be as described in RMC Section 18.24.203, Definitions of Words, Terms and Phrases, as amended. Additional use regulations for specified uses are provided below, after Figure 16 - Permitted Use Table.

When considering requests for a new land use, the administrator shall consider the potential effects of the use on adjacent properties in terms of requirements for services, visual impact, traffic generation, parking, the extent to which the use is consistent with other uses allowed in the use category, and other issues the administrator deems appropriate.

### **Meaning of Permitted Land Use Table Cell Entry**

- “P” - The use is permitted as a principal use in the use category by right, and is not subject to a discretionary review procedure.
- “SUP” - The use is permitted in that use category only after first obtaining a special use permit (SUP) according to the procedures and criteria set forth in RMC Section 18.06.405, Special Use Permit, as amended.
- “SPR” - The use is permitted in the use category only after first obtaining administrative approval of a site plan review as set forth in RMC Section 18.06.407, Site Plan Review, as amended.
- “A” – The use is permitted as an accessory use to a primary use allowed in the zoning district.
- Blank Cell – The use is prohibited.



**Figure 16: Permitted Use Table**

Use Category	Multi-Family	SF4	SF6	LLR-1	NC	TC	I	Parks	Open Space	Additional Use Regulations
<b>Residential Uses</b>										
Cluster Development		SUP	SUP	SUP						Refer to Additional Regulations for Principal Uses - RMC 18.08.202(a)(2), as amended
Multi-Family	P				P	P				Refer to Additional Regulations for Principal Uses - RMC 18.08.202(a)(8), as amended
Nursing Home/Assisted Living	P									Refer to use regulations on page <del>422</del>
Single-Family, Attached/Condominium Townhouse	P	P				P				Refer to Additional Regulations for Principal Uses - RMC 18.08.202(a)(10), as amended
Single-Family, Detached	P	P	P	P						
Single-Family, Zero Lot Line	P	P	P							
<b>Commercial Uses</b>										
Antique/Collectable Store					P	P				
Bakery/Retail					P	P				
Bar					SUP	P				
Barber/Beauty Shop					P	P				
Bed and Breakfast	P	P	P	P						Refer to Additional Regulations for Principal Uses - RMC 18.08.202(d)(1), as amended

Use Category	Multi-Family	SF4	SF6	LLR-1	NC	TC	I	Parks	Open Space	Additional Use Regulations
Car Wash						SUP				
Childcare Center					P	P				Refer to Additional Regulations for Principal Uses - RMC 18.08.202(b)(7), as amended
Cleaners-Commercial					P	P				Refer to use regulations <a href="#">on page 432</a>
Coffee House	SUP	SUP	SUP	SUP	P	P				Refer to use regulations <a href="#">on page 423</a>
Copy Center					P	P				Refer to Additional Regulations for Principal Uses - RMC 18.08.202(b)(9), as amended
Drive-through Facility						P				Refer to use regulations on page <a href="#">4242</a>
Financial Institution					P	P				Refer to use regulations on page <a href="#">422</a>
Fitness Center					P	P				
Freestanding Automated Teller Machine (ATM)						P				Refer to Additional Regulations for Principal Uses - RMC 18.08.202(b)(13), as amended
Gas Station						P				Refer to Additional Regulations for Principal Uses - RMC 18.08.202(b)(25), as amended

Use Category	Multi-Family	SF4	SF6	LLR-1	NC	TC	I	Parks	Open Space	Additional Use Regulations
General Personal Services					P	P				Refer to Additional Regulations for Principal Uses - RMC18.08.202(b)(14), as amended
General Retail Store or Commercial Use Other than Listed					P	P				Refer to Additional Regulations for Principal Uses - RMC 18.08.202(b)(15), as amended
Laundry, Drop-off/Pickup					P	P				For NC, Refer to Additional Regulations for Principal Uses - RMC 18.08.202(b)(18), as amended
Laundry, Self Service					P	P				
Medical Facility, Day Use Only					P	P				
Office, Other					P	P	P			Refer to Additional Regulations for Principal Uses - RMC 18.08.202(b)(20)c, as amended
Restaurant with or w/out Alcohol					P	P				Refer to Additional Regulations for Principal Uses - RMC 18.08.202(b)(24), as amended
Uses Operating Between the Hours of 11:00pm and 5:00am					SUP	SUP	SUP			
<b>Institutional, Public and Community Service Uses</b>										
Church, House of Worship	SPR	SPR	SPR	SPR	P	P				Refer to Additional Regulations for Principal Uses - RMC 18.08.202(e)(4), as amended

Use Category	Multi-Family	SF4	SF6	LLR-1	NC	TC	I	Parks	Open Space	Additional Use Regulations
Communication Facility (Equipment Only)	P	P	P	P	P	P	P		P	Refer to Additional Regulations for Principal Uses - RMC 18.08.202(e)(5), as amended
Community Center, Private		P	P		P					Refer to use regulations on page 4 <del>33</del>
Electric Utility Substation	SPR	SPR	SPR	SPR	SPR	SPR			SUP	Refer to use regulations on page 4 <del>33</del>
Fire Station & Police Substation	P	P	P	P	P	P				
Library, Art Gallery, Museum					P	P				
Outdoor Amphitheater					SUP					Refer to use regulations on page 4 <del>33</del>
<u>Park, Flatfields or Recreation Area</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>		<u>P</u>	<u>P</u>	<u>Refer to Open Space Development Standards on pages 59-80</u>
Post Office					P					
Public Transit or School Bus Shelter	P	P	P	P	P	P	P			
School, Primary (Public or Private)	SPR	SPR	SPR							Refer to Additional Regulations for Principal Uses - RMC 18.08.202(e)(8), as amended
School, Secondary (Public or Private)	SPR	SPR	SPR		SPR	SPR				Refer to Additional Regulations for Principal Uses – RMC 18.08.202(e)(9), as amended
Utilities, Alternative Systems	P	P	P	P	P	P	P	P	P	Refer to Standards for Specific Accessory Uses - RMC 18.08.203(e)(6), as amended

Use Category	Multi-Family	SF4	SF6	LLR-1	NC	TC	I	Parks	Open Space	Additional Use Regulations
Utility box/well house, backup generator, pumping or booster station, water treatment facility, sewer lift station	P	P	P	P	P	P	P	P	P	Refer to use regulations on page 444
<b>Industrial, Manufacturing, Wholesale, Distribution and Transportation</b>										
Food Processing/Wholesale Bakery							P			
Heavy Machinery & Equipment (Rental Sales & Service)							P			
Indoor Manufacturing, Processing, Assembly or Fabrication							P			
Maintenance, Repair or Renovation Business						P	P			For TC, Refer to Standards for Additional Regulations for Principal Uses – RMC 18.08.202(f)(9), as amended
Mini-warehouse						SUP	P			For TC, Refer to Standards for Additional Regulations for Principal Uses - RMC 18.08.202(f)(10), as amended
Printing & Publishing						P	P			
Rental Store, w/Outdoor Storage: Truck Rental						SUP	P			



Use Category	Multi-Family	SF4	SF6	LLR-1	NC	TC	I	Parks	Open Space	Additional Use Regulations
Salvage or Reclamation of Products (Indoors)							P			
Showroom						P				
Taxidermist						P	P			
Truck Terminal							SUP			
Warehouse/Distribution Center							P			
Welding Repair							P			Refer to Standards for Additional Principal Uses – RMC 18.08.202(f)(16), as amended
Wholesale of Construction Materials							P			Refer to I Standards for Additional Principal Uses – RMC 18.08.202(f)(17), as amended
Wholesale of Products Manufactured or Assembled on Site							P			
Temporary Uses										
All Temporary Uses in the StoneGate PUD Handbook shall comply with the same standards set forth in RMC 18.08.201 (Permitted Uses by Base Zoning District) standards, as amended, utilizing MF-30, SF4, SF6, LLR-1, NC, AC, and I zoning designations										
Construction Water	Refer to use regulations on page 44									
Flatfields	Refer to use regulations on page 44									
Material Processing and Stockpiles	Refer to use regulations on page 44									
Accessory Uses										
Accessory Uses	All Accessory Uses in the StoneGate PUD Handbook shall comply with the same standards set forth in RMC 18.08.201 (Permitted Uses by Base Zoning District) standards, as amended, utilizing MF-30, SF4, SF6, LLR-1, NC, AC, and I zoning designations									
Accessory Dwelling Units (ADUs)	A	A	A							Refer to use regulations on page 465

## **b. Additional Use Regulations**

### **RESIDENTIAL**

#### **Nursing home/assisted living facility**

- 1) Facilities licensed for more than ten beds shall have access to a collector or arterial street.

### **COMMERCIAL USES**

#### **Cleaners, commercial**

All commercial cleaner uses shall comply with the following regulations:

- 1) Shall only be permitted on the first floor unless the building is over three stories, then may be placed on first or second floor.
- 2) Drop-off only. Cleaning shall be performed off-site.

#### **Coffee house**

A gathering place which serves coffee or juice, which may or may not include a restaurant, and does not exceed 2,000 square feet. Sale of alcohol (if any) shall not exceed ten percent of gross receipts.

- 1) Hours of operation shall be limited from 6:00 a.m. to 11:00 p.m.
- 2) Drive-throughs are prohibited.
- 3) Parking maximum shall be based on one space for every 250 square feet and shall be located in the rear of the site.
- 4) No parking shall be allowed in front of any residence.
- 5) Facilities for bicycle parking shall be provided at a rate of one space for every three automobile parking stalls provided.
- 6) The parcel shall have direct access to a pedestrian or trail connection.
- 7) Residential use is allowed on the second floor.

#### **Drive-through facility**

All drive-through facilities shall comply with the following use regulations, as applicable:

- 1) Drive-throughs shall be visually screened. Screening shall include a minimum of 36 inches in height, and be achieved with street trees and one of the following methods:
  - a) A berm;
  - b) A planting screen, including shrubs;
  - c) A decorative wall; or
  - d) A combination of the above, or as shown on the approved detailed site plan.
- 2) Drive-throughs shall not have access to local residential streets unless needed for traffic safety.
- 3) Stacking lanes for drive-through service windows shall be situated so as to not block any other drive aisle or parking space.
- 4) All drive-through facilities shall include 40 lineal feet of stacking area in front of each window or bay plus one off-street stacking area of 140 lineal feet in length (measured from window).

#### **Financial institution**

Financial institution uses shall comply with the following regulations:

- 1) Shall only be permitted on the first floor.
- 2) Access shall be from a collector or arterial street.

- 3) Drive-through facilities shall comply with drive-through facility standards.
- 4) Drive-through facilities accessory to financial institutions are prohibited in the NC land use category.

## **INSTITUTIONAL PUBLIC AND COMMUNITY SERVICE**

### **Community center, private**

- 1) Private community centers located outside of the Neighborhood Center shall be reviewed at the time of tentative map, special use permit, or building permit.

### **Electric utility substation**

- 1) Electric generating plant/electric utility substation uses shall comply with the following regulations:
  - a) Noise shall comply with RMC Section 18.12.304, Residential Adjacency Standards, as amended.
  - b) Facility shall be screened from view of the street and adjacent properties using any combination of the following:
    - i) Landscaping shall consist of a combination of semi-opaque trees and shrubs, except that beneath overhead power lines no trees with an expected height greater than 25 feet at maturity shall be planted. Selection of plant material shall coordinate with the vegetation in the surrounding land uses, or expected land uses (i.e., ornamental domestic plants shall be used in areas where surrounding development has used domestic plants. Native vegetation shall be emphasized in rural locations or where surrounding development has used native plantings).
    - ii) All ground within landscaped areas shall be covered with ground covering. If rock is used, rock color and size shall be selected to blend in with the surroundings.
    - iii) Chain link fencing with vinyl slats, eight feet in height, will be allowed.
    - iv) Other solid screening materials may be substituted at the approval of the Administrator. These screenings may include solid wood fencing, provided it blends with surrounding land uses, solid masonry walls, or precast concrete walls with a suitable architectural finish.
    - v) Landscape buffers shall be constructed in the front and side setbacks. Dimensions of these setbacks shall be greater than or equal to those defined in the section governing each land use category.
    - vi) At the discretion of the Administrator, installation of landscaping and irrigation may be delayed until development is constructed adjacent to the utility facility.
    - vii) Substations may be enclosed by a fence six feet in height with barbed wire used above it as long as the total height thereof does not exceed nine feet. Arms carrying barbed wire must extend inward or straight up.

### **Outdoor amphitheater**

- 1) Outdoor entertainment and/or amplified music and speech shall be limited to operate between the hours of 8:00 a.m. and 10:00 p.m. on Friday and Saturday and 8:00 a.m. to 9:00 p.m. on Sunday through Thursday. All events operating outside past these times shall be fully contained within a permanent structure.
- 2) A six-foot-tall landscaped earthen berm shall be constructed to screen the outdoor amphitheater from the residential development to the adjacent west.
- 3) Karaoke is prohibited.

### **Utility box/well house, backup generator, pumping or booster station, water treatment facility, sewer lift station**

In all zoning districts, all utility box/well house, back-up generator, pumping or booster station uses shall comply with the following regulations:

- 1) Facilities shall be screened from view of adjacent properties using any combination of the following:
  - a) Yards and setbacks shall be landscaped to blend with the surrounding land uses.
  - b) Solid fencing will not be required for facilities where all equipment is contained within a building. Architectural features of buildings shall be designed to blend with surrounding land uses.
  - c) All landscaped areas shall have complete ground cover. If rock is used, rock color and size shall be selected to blend with the surroundings.
  - d) The utility structure shall be painted a natural earth tone color to blend in with the surrounding environment.
  - e) At the discretion of the administrator, installation of landscaping and irrigation may be delayed until development is constructed adjacent to the utility facility.
- 2) Noise shall comply with RMC Section 18.12.304(g), Noise at Residential Property Lines, as amended.

### **TEMPORARY USES**

#### **Construction Water**

Temporary on-site water storage such as ponds and/or water tanks will be used for construction water, dust control, and fire suppression. A permanent construction water fill site will be constructed in Phase 2 to facilitate construction and dust control water for merchant builders grading use. The final location and design requirements will be determined by the special use permit or tentative map, as applicable.

#### **Flatfields**

- 1) With the exception of paved ADA parking, temporary toilets (including access to an ADA toilet) and a driveway apron, paved parking and permanent restrooms shall not be required for the temporary flatfield amenities.
- 2) Asphalt grindings or alternative surfaces, as approved by the Community Development Department, may be used.

#### **Material Processing and Stockpiles**

Soils will be selectively removed, stockpiled, and processed to be reused throughout the construction of the entire project. Areas that are not subject to phased grading, selective removal, stockpiles, or processing will be left in their natural undisturbed condition.

- 1) Stockpiling shall not impair natural drainage patterns and will be protected against erosion.
- 2) Standards for stockpiling shall comply with RMC Section 18.08.204(d)(8), Temporary stockpiling, as amended, and subject to the following modifications:
  - a) Material processing, including crushing, material recycling, and storage is allowed when located farther than 750 feet from a residential home. Material processing and storage, excluding crushing, is allowed within 750 feet of residentially-zoned property.



- b) Stockpiling and associated material processing may operate 24 hours a day if there is no residential house within 750 feet. If the site is located within 750 feet of a residential house, stockpiling and material processing may operate between the hours of 6:00 a.m. and 11:00 p.m. If an adequate buffer exists between the material processing site and the residentially-zoned property, as determined by the Administrator, the Administrator may allow extend hours of operations and/or hours of material processing. Adequate buffers may include, but are not limited to, freeways, hillsides, sound walls, or structures.
- c) Aggregate materials produced shall not be available for commercial sale.
- d) Stockpile permits will run concurrent with each successive grading permit. Stockpiles are limited to 24 consecutive months if no grading permits are active. One extension may be granted by the Administrator for an additional 12 months if the stockpile is not within 100 feet of a residential structure.
- e) Stockpiling shall not impair natural drainage patterns and will be protected against erosion.
- f) Stockpiles will be fenced with high visibility safety fencing without additional visual screening.
- g) The haul routes associated with the stockpiling activity will be approved at each respective special use permit or tentative map, as applicable.
- h) Stockpile sites will require security to restore the site to pre-stockpiling conditions. These stockpile sites shall be covered under one of the following types of security:
  - (1) Subdivision Bond;
  - (2) Restoration, Landscaping, and Revegetation Bond;
  - (3) Encroachment/Excavation Permit Bond; or
  - (4) Labor and Material Bond.
- i) Stockpile sites may be located in areas that are to be graded and developed in future phases.

## **c. Standards for Accessory Uses and Structures**

### **General Provisions and Standards**

- 1) **Accessory uses permitted** - If an accessory use is not listed in the Permitted Land Use Table (Figure 16), the Administrator may allow the accessory use if he/she finds that such use satisfies the definition of “accessory use” in RMC Section 18.24.203, Definition of Words, Terms and Phrases, as amended, and that the unlisted use is customarily incidental to the principal use or structure, and is located on the same lot or tract of land as the principal use or structure. In making such determination, the Administrator shall apply the criteria for unlisted uses stated in RMC Section 18.08.201(a) (4), Similar and prohibited uses, as amended, to the extent applicable.
- 2) **Accessory structures permitted** - An accessory structure that is customarily incidental to the principal use or structure, and is located on the same lot or tract of land as the principal use or structure, shall be permitted, subject to the regulations of RMC Section 18.08.203, Standards for Accessory Uses and Structures, as amended. The Administrator shall have the authority to determine whether a proposed accessory structure is “accessory” consistent with this section, the definition of “accessory structure” in RMC Section 18.24.203, Definition of Words, Terms and Phrases, and, as amended the purpose and intent of the subject zoning district.
- 3) **Applicable regulations** - All accessory uses, structures, and activities shall be subject

to the general, dimensional, operational, and use-specific regulations stated in this PUD. In case of any conflict between the accessory use/structure standards in this PUD and RMC Section 18.08.203, Standards for Accessory Uses and Structures, as amended, in this PUD, shall apply.

### **Accessory Dwelling Units (ADUs)**

- 1) Accessory dwellings may be attached to or integrated with the principal structure, or may be located in a detached accessory structure (i.e. a detached carriage house or garage).
- 2) Only lots developed with one residential unit are eligible for an ADU.
- 3) No more than one ADU shall be provided on a lot.
- 4) The ADU shall not count in the calculation of density, and may increase the allowable density by a factor of two (i.e. if the land use allows one unit/3,000 square feet, the additional unit may increase the density to one unit/1,500 square feet).
- 5) The total square footage of the ADU shall not exceed 35 percent of the total square footage of the primary structure, or 800 square feet, whichever is less.
- 6) All minimum side and rear yard requirements for the main building shall be met.
- 7) The front door shall not be visible from the same street as the door of the primary structure.
- 8) A minimum 400-square-foot rear yard area shall be maintained on the parcel, and such rear yard shall have a minimum dimension of eight feet.
- 9) One off-street parking space per bedroom shall be provided.
- 10) Parking shall not occupy the front yard.
- 11) ADUs may be up to two stories, with a maximum height of 24 feet.
- 12) The ADU shall be architecturally compatible with the primary structure.
- 13) The ADU shall meet the setbacks of the zoning category.

### **Accessory Buildings and Structures**

The standards in this subsection shall apply to all accessory buildings and structures in the residential land use category.

- 1) **Accessory building requires principal building** - No private garages or other accessory buildings or structures may be constructed or located in any residential land use category without an approved principal building.
- 2) **Number of permitted detached accessory structures on a single lot in a residential land use category** - Limits on the number of detached accessory structures allowed on a single lot in a residential land use category are shown in Figure 17. These limits shall apply only to detached accessory structures with a gross floor area of 400 square feet or larger. The maximum number of accessory structures shown here may not be possible to achieve in all circumstances; each case will depend on the applicability of other bulk and dimensional standards.
- 3) **Design of detached accessory buildings** - A detached accessory building in a residential land use category that contains 400 square feet or more of gross floor area shall be architecturally compatible with the existing or proposed principal residential building. Architectural compatibility must be achieved by including two of the following three elements in the accessory building design:
  - a) The exterior finish is constructed with materials compatible with the principal building materials. The new materials shall be either identical or similar to the principal building materials. For example, details of synthetic siding should match that of traditional wood siding.

- b) Contemporary interpretations of architectural features such as trim, fenestration, window frames, dormers, columns, gables, decorative wood, or metal work found on the existing principal building are used.
- c) The roof pitch is the same as that of the most predominant roof plane of the principal building.

**Figure 17: Detached Accessory Structures Table**

Maximum Number of Detached Accessory Structures Allowed on a Residential Lot	
Residential Lot Size	Maximum Number of Detached Accessory Structures per Residential Lot
Lots of 15,000 SF in size or larger	3 structures per acre, plus 1 detached guest quarters
Lots smaller than 15,000 SF in size	2 structures, plus 1 detached guest quarters

#### **Bulk/Dimensional, Density and Intensity Standards**

- 1) **Lot, Bulk and Dimensional Standards for Accessory Structures and Buildings** - All accessory structures and buildings in the PUD shall comply with the land use categories lot, bulk and dimensional standards shown below. Non-residential Land Use Categories shall conform to RMC Section 18.08.203(d)(1), Accessory Buildings and Structures in Nonresidential Zoning Districts, as amended.

**Figure 18: Lot Bulk and Dimensional Standards for Accessory Structures Table**

Standard	Lots Greater than 15,000 SF	Lots Smaller than 15,000 SF
Minimum separation from all other structures	3 feet	3 feet
Minimum property line setback – Front	Same as the principal dwelling	Same as the principal dwelling
Minimum property line setback – Side and Rear	Side or Rear Setback – 5 feet	
Maximum height	One story residential garage or carport – 16 feet Two story residential garage: Allowed only if second story is used for accessory dwelling unit, guest quarters, home occupation, or other habitable space, but not for storage.	
Maximum size of each detached accessory structure	50 percent of the square footage of the principal structure	

<u>Standard</u>	<u>Lots Greater than 15,000 SF</u>	<u>Lots Smaller than 15,000 SF</u>
Maximum cumulative area of all detached accessory structures	Total combined square footage of all detached accessory structures on the lot shall not exceed 60 percent of the square footage of the principal structure.	Total combined square footage of all detached accessory structures on the lot shall not exceed 50 percent of the square footage of the principal structure.

## **d. Residential Building Standards**

### **Facades and Articulation**

#### **Street Image Standards for New Single-Family Residential Structures**

- 1) This subsection's street image standards shall apply to all new single-family (detached and attached) residential structures in the PUD.
- 2) New single-family residential structures on lots 70 feet or wider shall utilize a minimum of three of the following techniques, and new single-family residential structures on lots narrower than 70 feet in width shall utilize a minimum of two of the following techniques to reduce the prominence of garages, promote pedestrian activity, and create visual diversity in single-family neighborhoods:
  - a) House forward: Living areas shall extend a minimum of three feet in front of the garage face.
  - b) Front porches: A 60-square-foot or larger covered front porch shall be provided and shall extend a minimum of three feet in front of the living area.
  - c) Courtyards: A 60-square-foot or larger front yard courtyard with a hard finished floor surface (concrete, wood, brick, pavers, etc.) and walls not exceeding three feet in height shall be provided and shall extend a minimum of three feet in front of the garage face.
  - d) Varied front setbacks: Front setbacks of adjacent homes on the same side of the street shall vary by a minimum of three feet.
  - e) Garage orientation: Garage doors shall not face the street (i.e., provide side loaded garages) and front elevations of garages shall be architecturally consistent with the living area front elevation.
  - f) Reduced garage width: Garages shall not exceed 40 percent of the front elevation.
- 3) No identical or mirrored front elevations may be repeated on adjacent lots or facing lots (across the street). Adjacent and facing lots may share the same floor plan, but must have different front elevations. A different appearance for this section includes a different roofline.

### **Projections**

The following intrusions are permitted into a required yard setback:

- 1) Cornices, canopies, bay windows, chimneys, eaves, or other similar architectural features may extend into a required yard not to exceed two feet.
- 2) Outside stairs or landing places, if unroofed or unenclosed, may extend into required yards for a distance not to exceed three feet.
- 3) Air conditioning units will be allowed to extend up to 50 percent of the distance of the required side yard setback.

### **Exterior Building Materials**

- 1) The following materials are permitted for the building exterior:
  - a) Natural and/or Cultured Stone
  - b) Stucco
  - c) Simulated Wood

- d) Fiberboard Siding
- 2) Aluminum or Vinyl siding is prohibited in the StoneGate PUD.
- 3) The following materials are permitted for windows:
  - a) Vinyl
  - b) Wood
  - c) Wood clad
  - d) Fiberglass or aluminum with an exterior in Matte Finish
- 4) Siding and roofing design shall be reviewed and approved by the ARC. The intent is to use earth tone colors that blend in with the natural surroundings.

### **Roof Design and Permitted Materials**

A combination of varying roof pitches shall be required in the design to provide variation, presence, and dimension.

- 1) Roofs on sloping lots shall step down or up with the elevation.
- 2) Allowable roof materials include:
  - a) Composition Shingles
  - b) Metal
  - c) Slate
  - d) Concrete tile
  - e) Other materials similar in nature & look
- 3) Wood and shake shingles are prohibited.

### **e. Non-Residential Building Standards**

Non-residential building architecture shall be visually interesting in style and provide a strong design statement, and sense of identity to the project. Non-residential site design should emphasize walkability and avoid conflicts between pedestrian and vehicular circulation and activity. All non-residential buildings shall be reviewed and approved by the ARC and the City of Reno through the special use permit or building permit process, as applicable.

#### **Neighborhood Center and Town Center Architecture**

Non-residential buildings within the Neighborhood Center and Town Center land use categories shall be compatible in mass, height, material and color, and incorporate common design elements such as awnings, landscaping, signage, and lighting consistent with the following standards:

- 1) To avoid a monotonous pedestrian environment, blank walls at pedestrian level are prohibited, when visible from right-of-way, residential property or public view. At least 50 percent of the width of a new or reconstructed first story building wall facing a street shall be devoted to pedestrian entrances, display window or windows affording views into retail, office, restaurant, or lobby space.
- 2) Any building wall greater than 100 feet in length, measured horizontally, that faces a street or connecting pedestrian walkway shall include at least three of the following features within each successive 30-foot section or part thereof:
  - a) Change in wall plane, such as projections or recesses, having a depth of at least three percent of the length of the facade and extending at least 20 percent of the length of the facade;
  - b) Change in texture or masonry pattern;
  - c) Change in color;
  - d) Windows;
  - e) Trellises with vines; or
  - f) An equivalent element that subdivides the wall into human scale proportions.



- 3) Roofs shall have no less than two of the following features:
  - a) Three or more roof slope planes.
  - b) Parapets concealing flat roofs and roof-top equipment such as HVAC units from public view. The average height of such parapets shall not exceed 15 percent of the height of the supporting wall and such parapets shall not at any point exceed one-third of the height of the supporting wall. Such parapets shall feature a three-dimensional cornice treatment.
  - c) Overhanging eaves, extending no less than three feet past the supporting walls; or,
  - d) Sloping roofs that do not exceed the average height of the supporting walls, with an average slope greater than or equal to one foot of vertical rise for every three feet of horizontal run and less than or equal to one foot of vertical rise for every one foot of horizontal run.
- 4) Consistent roof treatment shall be provided on all sides of the building.
- 5) The back sides of all cornices, parapets, and rooflines that are visible from an adjacent residential land use category or from a public street shall be finished.

### **Industrial Architecture**

The following standards shall apply to all new development in the Industrial land use category:

- 1) Buildings and structures shall be designed and placed upon the property so that the loading and unloading of materials or supplies shall be entirely within the property lines of the lot.
- 2) Loading docks, truck loading, storage, and refuse areas, platforms, and other such areas shall be located on the side(s) or rear of buildings, where possible. Site design considerations should include the location of refuse disposal facilities so that they will be adequately screened from public view.
- 3) Where loading docks and other service areas face a public street, they shall be screened from view with landscape planting, walls, fences, grade changes, or a combination of these techniques.
- 4) Pad-mounted transformers and other utility services shall be integrated into the site plan wherever possible. The necessity for utility connections, meter boxes, or other such facilities, should be recognized and integrated within the architectural design of the buildings.
- 5) Buildings in the Industrial land use category shall comply with RMC Section 18.12.301, Generally Applicable Site and Building Design Standards, as amended.
- 6) The design standards above are subject to review and modification by the Administrator for restrictions imposed upon a site due to physical constraints, or for conditions where existing facilities are being expanded and enforcement of these criteria would impose a hardship upon the applicant.
- 7) Development shall comply with RMC Section 18.12.301, Residential Adjacency Standards, as amended.

### **f. Construction Hours**

Construction hours for all construction activities shall be limited to between the hours of 7:00 a.m. and 6:00 p.m., Monday through Saturday. There shall be no construction on Sundays, excluding dust control and Storm Water Pollution Prevention Plan measures. This restriction includes grading and road construction activities. Construction hours for Temporary Uses of Material Processing and Stockpiling are identified on pages 44-45.

7)

## **fg. Parking**

Unless otherwise modified in this PUD, all off-street parking and loading shall comply with RMC Section 18.12.1101-1108, Off-Street Parking and Loading, as amended.

The administrator may permit alternate parking rates or adjustments when a report based on the Institute of Transportation Engineers (ITE) Manual, or another nationally accepted authority is submitted which substantiates/validates the use of a different standard.

## **gh. Signage**

Signage within the StoneGate PUD will include entry gateway, freestanding monument signs, building wall signs, wayfinding and regulatory signs in accordance with Signs - RMC Sections 18.16.101 through 701, as amended, with the following modifications noted below. Signs shall provide a cohesive historical ranch theme designed to promote community image, identity, and wayfinding. A signage package must be approved by the Master Developer at their sole discretion. All signs will be reviewed and approved by the ARC and the City of Reno through the special use permit, tentative map, building permit, and site improvement permit process, as applicable. Refer to Figure 20 – Sign Standards Table for maximum sign height, square footage, illumination, and location.

### **Gateway Locations**

#### **Primary Gateway**

The primary gateway or entry sign will be a freestanding monument sign located at the main entrance into the southern portion of StoneGate. The sign will have a maximum height of 12 feet and a maximum copy area of 100 square feet. Materials may include stone, masonry, brick, or equivalent. A schematic design of the sign shall be submitted to the Zoning administrator for review and approval prior to the issuance of the first Certificate of Occupancy within Phase 1.

#### **Secondary Gateway**

The secondary gateway or entry sign will be a freestanding monument sign located south of U.S. 395, at the northwest corner of the property, near the intersection of the U.S. 395 frontage road and the collector road entrance into StoneGate. The sign will have a maximum height of 8 feet and a maximum copy area of 60 square feet. A schematic design of the sign shall be submitted to the Zoning administrator for review and approval prior to the establishment of this access into the development and issuance of the first Certificate of Occupancy in Phase 2.

#### **Community Gateway**

The community entry signs will be freestanding monument signs located at the intersections of Arterials and Collector roadways. These signs will be located as you enter into a residential community. The signs will have a maximum height of 8 feet and a maximum copy area of 40 square feet in size. A schematic design of the sign shall be submitted to the Zoning administrator for review and approval during the site improvement permit process.

#### **Neighborhood Gateway Signs**

The neighborhood entry signs will be freestanding monument signs located at the entrance into each individual neighborhood. Signs will be limited to 6 feet in height and a maximum copy area of 40 square feet in size. A schematic design of the sign shall be submitted to the Zoning administrator for review and approval during the final subdivision map process.

## **Commercial Signs**

Commercial signs are specific to freestanding, monument and wall signs located in the active areas, including the Neighborhood Center, Town Center, and Community Center. These signs are intended to identify commercial businesses and activities associated with those businesses. The freestanding/monument signs shall be on-premise and only advertise commercial businesses within their respective shopping center.

## **Industrial Signs**

The Industrial signs are specific to the industrially-designated area located north of U.S. 395. There will be one freestanding/monument sign located at the entrance into the Industrial development. Each tenant will also utilize industrial wall sign standards to advertise their business. The freestanding/monument sign shall be an on-premise sign and limited to the larger industrial center in which it serves.

## **Public Facility Signs**

Public facility signs are used for public facility uses such as a fire station, police station, or community park. These signs are intended to blend in with their surroundings and serve as identification of the facility use.

## **Wayfinding/Regulatory Signs**

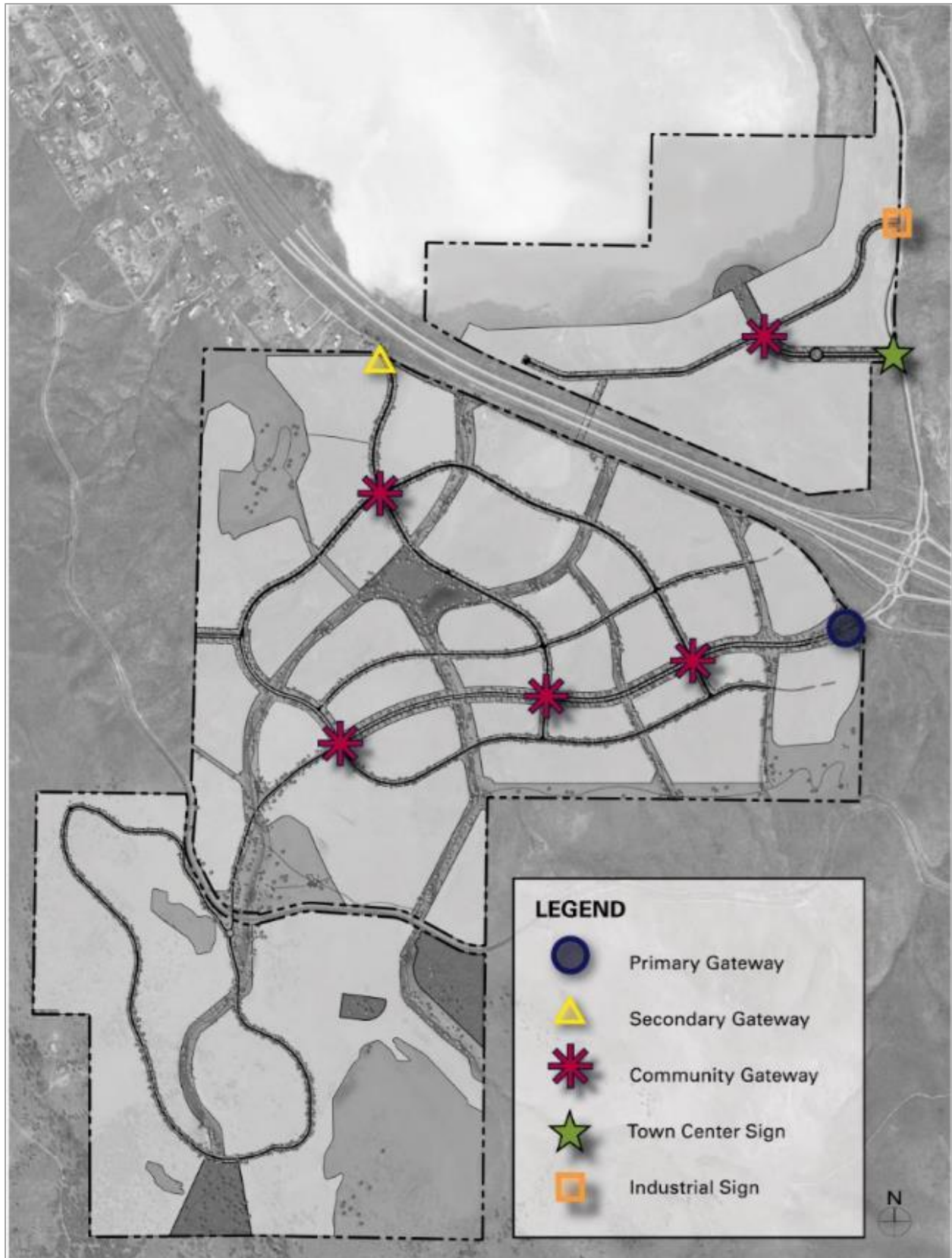
The Wayfinding/Regulatory signs are broken down into two categories: Wayfinding and Regulatory. They are designed to provide information and direction to locations within StoneGate. They are also used for standard regulatory signs, such as a stop sign or speed limit sign.

### **Wayfinding Signage**

Wayfinding signage will be provided throughout StoneGate community and includes, but is not limited to; retail wayfinding signage, trails signage, interpretive signage, directional maps, and other signage intended to direct and orient residents and visitors to locations and amenities. These signs are permitted along trails located adjacent to but not within the 100-year flood line of drainageways or streams, as needed for providing information and direction to trail users. All wayfinding signs located in a public right-of-way shall be submitted to the Zoning Administrator for review and approval during the building permit process.

### **Regulatory Signs**

Regulatory signage will be in conformance with the Manual on Uniform Traffic Control Devices (MUTCD) and conform to all standard height and size regulations. Posts for signs will be designed to look like they are made of natural materials, such as wood, and will conform to MUTCD material standards. Sign posts, breakaway types, and sign locations shall be in accordance with American Association of State Highway and Transportation Officials (AASHTO) Roadside Design Guidelines and MUTCD standards.



**Figure 19: Sign Location Map**

**Figure 20: Sign Standards Table**

Sign Type	Location	Max. Height for Freestanding	Max. Area	Illumination	Flashing/ Animated
<b>Entry Identification</b>					
Project Gateway (Freestanding Monument)	Primary Entry	12 feet	100 SF 48 inches max. letter height	Indirect	Not Allowed
	Secondary Entry	8 feet	60 SF 36 inches max. letter height		
Community Gateway (Freestanding Monument)	Located on Collector and Arterial right-of-way	8 feet	40 SF	Indirect	Not Allowed
Neighborhood Gateway (Freestanding Monument)	Located at the entrance into a neighborhood	6 feet	40 SF	Indirect	Not Allowed
<b>Commercial Signs</b>					
Neighborhood Commercial (NC) Sign (Freestanding Monument)**	1 per street frontage of Neighborhood Center	12 feet	60 SF 30 inches max. letter height	All types	Not Allowed
Neighborhood Commercial (NC) Tenant Wall Sign	Wall signs	N/A	1 SF of sign area per lineal foot of business frontage. 36 inches max. letter height. Notwithstanding, the above, each business shall be allowed a minimum of 40 square feet.	All types	Not Allowed
Community Center Sign (Freestanding Monument)	Maximum of two signs allowed and must be located within 200 feet of Community Center building	8 feet	20 SF	All types	Allowed between the hours of 7 a.m. – 10 p.m.
Town Center (TC) Sign (Freestanding Monument)**	One sign at main entry into Town Center	25 feet	300 SF 48 inches max. letter height.	All Types	Not Allowed



Sign Type	Location	Max. Height for Freestanding	Max. Area	Illumination	Flashing/ Animated
Town Center (TC) Tenant Wall Sign	Wall signs	NA	1 SF of sign area per lineal foot of business frontage. 30 inches maximum letter height. Notwithstanding the above, each business shall be allowed a minimum of 40 square feet.	All Types	Not Allowed
<b>Industrial Signs</b>					
Industrial (I) Sign (Freestanding/ Monument)**	One sign at main entry into Industrial	15 feet	160 SF 36 inches max. letter height	All Types	Not Allowed
Industrial (I) Tenant Wall Sign	Wall signs	NA	1 SF of sign area per lineal foot of business frontage. 30 inches maximum letter height. Notwithstanding, the above, each business shall be allowed a minimum of 40 square feet.	All Types	Not Allowed
<b>Public Facility Signs</b>					
Public Facility Sign (Freestanding Monument)	Fire Stations, Police Facilities	6 feet	Wall signs are limited in area to 20 SF per acre.	All types	Not Allowed
Public Facility Sign (Freestanding Monument)	Community Parks	6 feet	Wall signs are limited in area to 20 SF per acre.	All types	Allowed between the hours of 7 a.m. – 10 p.m. and only permitted within the Phase 2 park.

Sign Type	Location	Max. Height for Freestanding	Max. Area	Illumination	Flashing/ Animated
<b>Wayfinding/Regulatory Signs</b>					
Wayfinding Signs	As needed	12 feet	40 SF. 10 inches max letter height	Indirect	Not Allowed
Regulatory Signs	Right-of-Ways, Open Space	Conformance with the Manual on Uniform Traffic Control Devices (MUTCD)	Conformance with the Manual on Uniform Traffic Control Devices (MUTCD)	N/A	N/A

\*School signage shall be addressed at the time of Site Plan Review.

\*\*All commercial and industrial signs must be on-premise signs.

## **ih. Exterior Lighting**

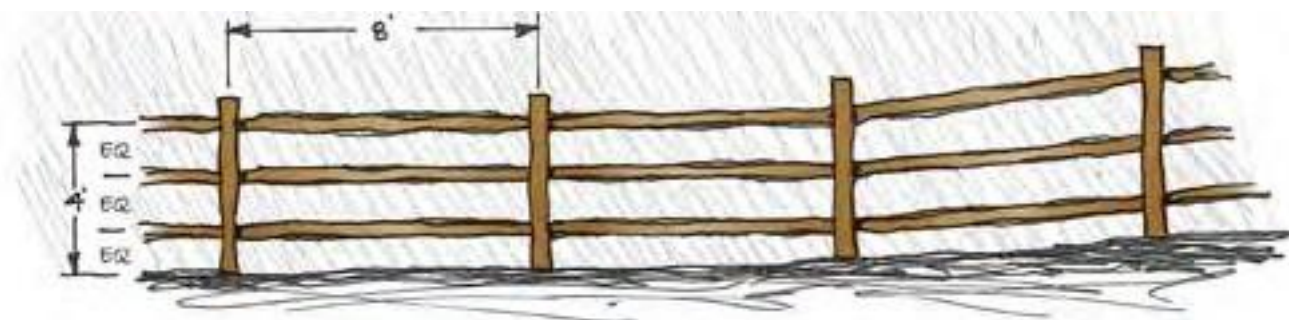
Exterior lighting within the StoneGate PUD is intended to be unobtrusive and to add to the rural character of the surrounding area. Lighting within the PUD shall be consistent with the architectural design of the buildings and conform to RMC Section 18.12.304(e), Spillover Lighting, as amended. Lighting spacing will provide low-level visibility and safety of the community and will be designed as follows:

- 1) Lighting fixtures shall be limited to 20 feet in height.
- 2) Lighting from non-residential development shall not exceed 0.5-foot candles at any perimeter property line adjacent to residentially developed and/or zoned property.
- 3) Lighting shall use cut-off fixtures, refractors or housing shields to eliminate light spillover.
- 4) Landscape lighting shall be soft, unobtrusive and directed and/or shielded to prevent glare.
- 5) A final site lighting photometric plan shall be submitted, reviewed and approved by the Administrator prior to the issuance of each non-residential building permit.
- 6) All exterior lighting will follow "Dark Sky" principles. Covers must be installed on all lighting fixtures, and lamps must not extend below the bottom of the cover when the light will be visible from residences or public right-of-way.
- 7) Exterior lighting is permitted:
  - a) Along arterial and collector roads
  - b) At arterial and collector intersections
  - c) Within park boundaries
  - d) Within the Neighborhood Center, Town Center and Industrial land uses categories
  - e) Bollard lighting is permitted along trails, not to exceed 42 inches in height.
  - f) Lighting for schools shall be reviewed through the site plan review process.
- 8) Use of LED shall be used in all non-residential lighting design.
- 9) Use of motion sensor lighting shall be incorporated in all non-residential exterior lighting, excluding parking lots or other areas where safety is impacted.

## j. Fencing

Fencing within the StoneGate PUD is intended to add aesthetic enhancement, while providing necessary privacy and separation of uses. Fencing types and materials shall be consistent along the project boundary and along backbone roadways to present a unified look throughout the PUD. Fencing shall comply with the standards outlined below and be reviewed during the special use permit or tentative map process, as applicable.

- 1) Solid view wood fencing is permitted along arterial streets and collector streets and is limited to six feet in height.
  - a) For fencing with pilasters, the maximum pilaster spacing shall be 56 feet.
- 2) Solid view fencing is permitted along rear and side yard property lines and is limited to six feet in height, except when adjacent to open space and trail corridors.
  - a) Corner lot fencing shall not obstruct or interfere with a clear line of sight for the drivers of approaching vehicles within the vision triangle between two and one-half feet and eight feet above the grade of the curb.
- 3) Fencing shall be set back a minimum of eight feet from the front face of any structure, so the fence does not align with the front of the house.
- 4) Fencing shall be natural in color. No painting is permitted. Only clear coat stain is permitted. Wood fencing shall be treated prior to construction.
- 5) Fencing with sharp protrusions is prohibited.
- 6) Fencing adjacent to trail corridors or open space is subject to the following standards.
  - a) No solid fencing is permitted along trail corridors or common open space.
  - b) Open view fencing shall be used along all corridors (Figure 21 - Typical Split Rail Fence).
  - c) Only black vinyl clad wire mesh is permitted on fences as a material to keep unwanted animals out.
  - d) Solid view fencing alongside yards shall step down to four feet, beginning at least eight feet from the rear property line.
  - e) No chain link fencing is permitted unless associated with sport fields or sport courts and shall be vinyl coated.
  - f) Gates that open inward are permitted on private residential lots to access designated common open space and/or trails.



**Figure 21: Typical Split Rail Fence**

- 7) Where Industrial uses are proposed adjacent to residential development, a minimum six-foot-high fence or berm shall be provided to screen the two uses.

### **jk. Screening of Outdoor Service Areas, Utilities, and Equipment**

Screening of utilities, equipment, and outdoor service areas (i.e. trash enclosures) shall conform to RMC Section 18.12.1208, Screening of Outdoor Service Areas, Utilities, and Equipment, as amended.

### **lk. Rockery/Retaining Wall Standards**

Rockery and retaining walls will use natural stone colors.

- 1) Concrete retaining walls will be finished with a texture and color to replicate natural stone.
- 2) Retaining walls will not exceed ten feet in height, measured from base of the exposed wall.
- 3) Rockery walls design shall conform to the City of Reno Policy 4003-Rockery Wall Design Standards, as amended.
- 4) Rockery and retaining wall height, color and location will be reviewed with the special use permit or tentative map, as applicable.

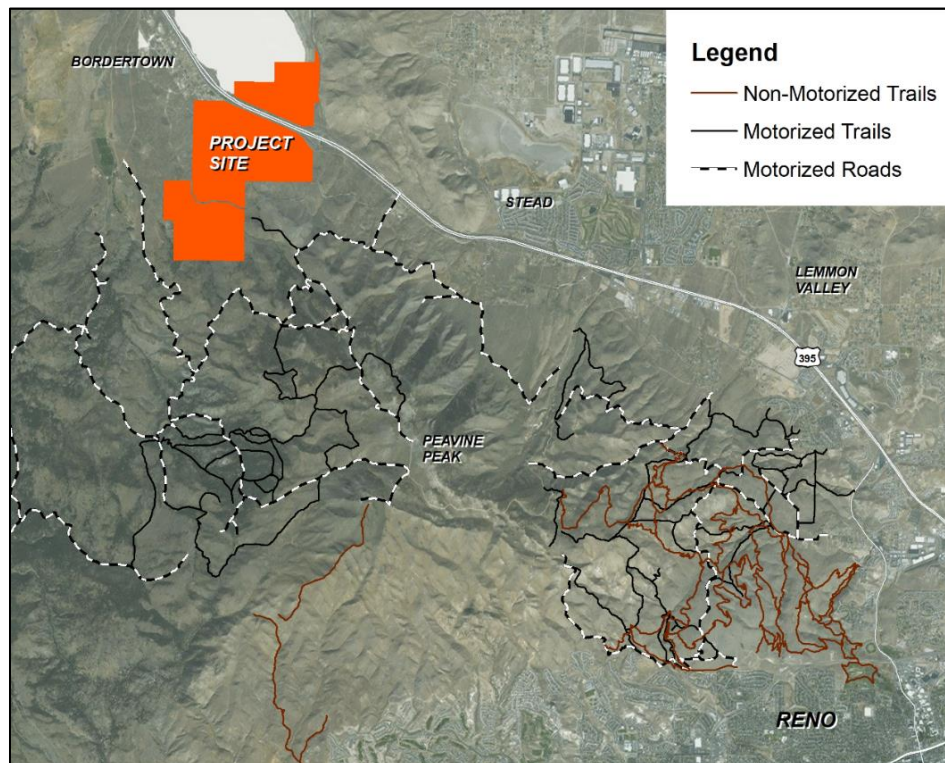
## **ml. Open Space**

Trails will be provided along the primary (community) and secondary (neighborhood) corridors through the core of the project (Figure 23 – StoneGate Trail System). Designated parks are located in the Town Center to the north and within Phases 2 and 4. Trailheads will be provided to connect the trail system to adjacent U.S. National Forest Service land on the south and east sides of the project, within Phase 4. All designated parks, trails, and open space with the StoneGate community will be open to the public.

Common open space and associated improvements, including parks and trail corridors, will be phased with development, as determined during the location and review of each special use permit, parcel map, tentative map, building permit, or grading permit, as applicable.

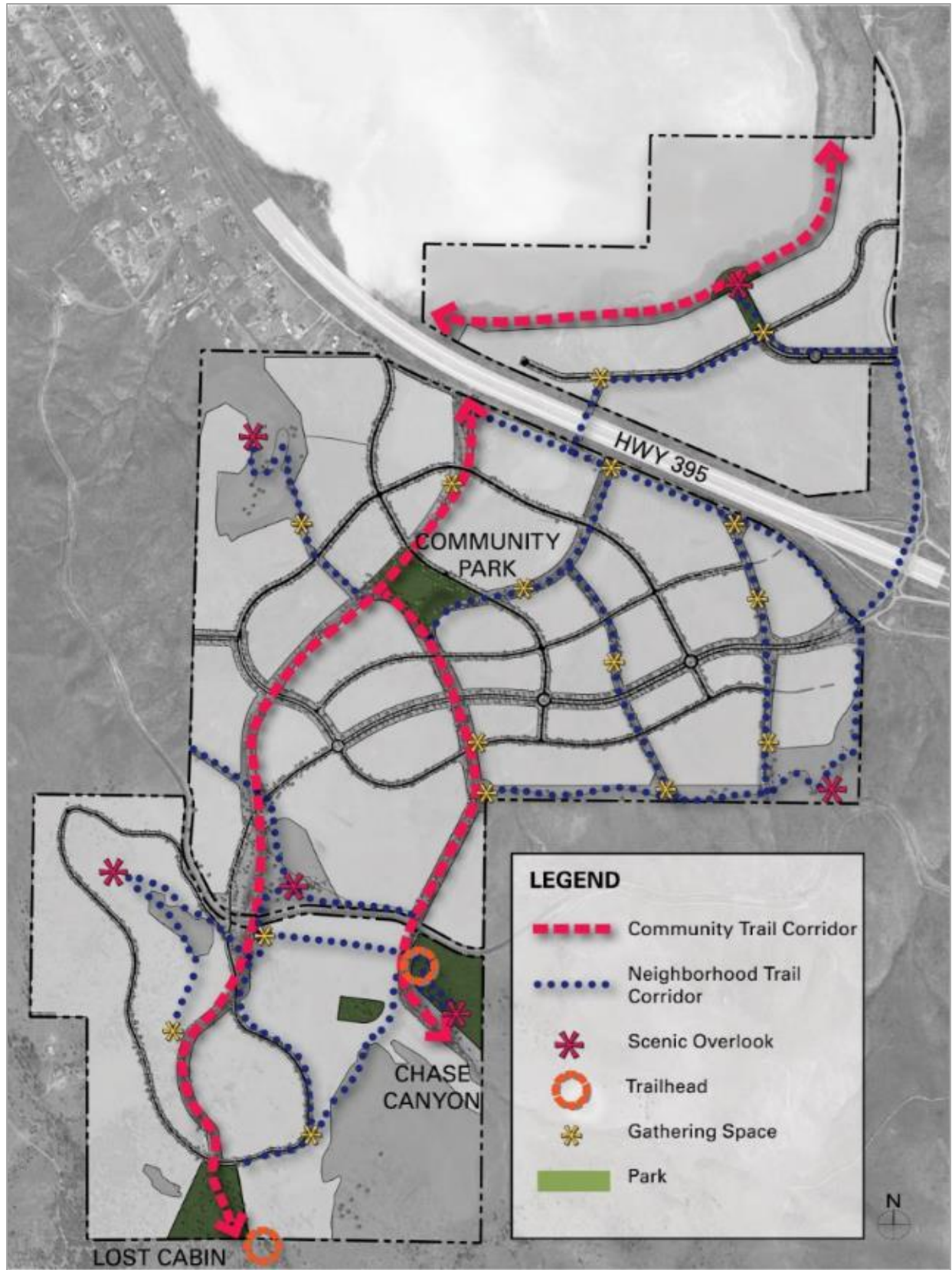
### **Off-Site Trail Access**

Phase 4 of StoneGate provides direct connections to the adjacent U.S. Forest Service land and trail network. Off-site trail access will be contingent upon an agreement with U.S. Forest Service prior to approval of the first tentative map of Phase 4. The Master Developer will coordinate with local groups, such as The Biggest Little Trail Stewardship (Formerly known as Poedunk) to design, construct, and maintain trail access between the PUD and the adjacent Toiyabe National Forest. Specific design elements shall incorporate horse trailer access, parking, and circulation, and will be based on the U.S. Forest Service staff approval. Prior to approval of the first tentative map in Phase 4, the applicant shall provide City of Reno staff with proof that a plan has been submitted, which includes timing for the National Environmental Policy Act (NEPA) and documentation that an agreement for construction of improvements is in place with the U.S. Forest Service. Prior to any development providing access to U.S. Forest Service lands, the applicant shall be required to provide the City of Reno staff with an approval letter from the U.S. Forest Service.



**Figure 22: Regional Trail Connections**





**Figure 23: StoneGate Trail System**

## **nm. Trail and Trailhead Design Standards**

The trail system (Figure 23 - StoneGate Trail System) is comprised of primary community trails and secondary neighborhood trails. Trails will accommodate bikes and pedestrians, connecting people from their homes to trailheads and community destinations. The trails are designed to provide:

- Maintenance access to the primary drainageway channels.
- Connections and accessibility to neighborhoods through cul-de-sac connections.
- Access to natural and landscaped open spaces, schools, parks, Neighborhood Center, and Town Center uses with pedestrian and bicycle trail systems.
- Reduced reliance on vehicular travel and increase pedestrian opportunities.

The primary community trail corridors connect the Neighborhood Center, Town Center, Parks, and public facilities, which contain uses focused on community activities. The secondary neighborhood trail corridors will connect the community trails to the neighborhoods. Trail access connecting the northern development (north of U.S. 395) and the southern residential development (south of U.S. 395) shall be provided at two different points. One trail connection will be provided at the White Lake interchange and a second trail connection will provide a pedestrian crossing under U.S. 395. Trail and drainageway design will be reviewed with each tentative map or special use permit, as applicable. Construction of the improvements will be completed with each phase, per Figure 3 - Conceptual Development Phasing.

**Figure 24: Trail Standards Table**

Trail Type	Minimum Corridor Width	Primary Trail Width/Surface	Secondary Trail Width/Surface	Location (Refer to Figure 23)
Community Trail	150 feet	Min. 12 feet Asphalt Trail (Maintenance)	6 feet Soft Surface (native soil)	Primary drainage channels from Chase Canyon and Lost Cabin to Neighborhood Center and Community Park.
Neighborhood Trail	70 feet	Min. 8 feet Asphalt Trail (Maintenance) <sup>1</sup>	4 feet Soft Surface (native soil)	Secondary drainage channels between neighborhoods connecting to the community trails.
Pedestrian Trail	20 feet	Min. 12 feet Asphalt Trail (Maintenance)	NA	Between lots connecting local streets to trails.
Trailhead	NA	Min. 8 feet Asphalt Trail	4 feet Soft Surface (native soil)	Lost Cabin, Chase Canyon
Scenic Overlook Amenity	NA	NA	NA	At designated locations based on desired views.
Gathering Space	NA	NA	NA	Located within trails. (Refer to page <del>6968</del> for standards)

Note: 1 - The Neighborhood Trail crossing at White Lake Parkway and crossing under U.S. 395 shall be designed with a minimum trail width of eight feet through the interchange that connects the south property and the north property.

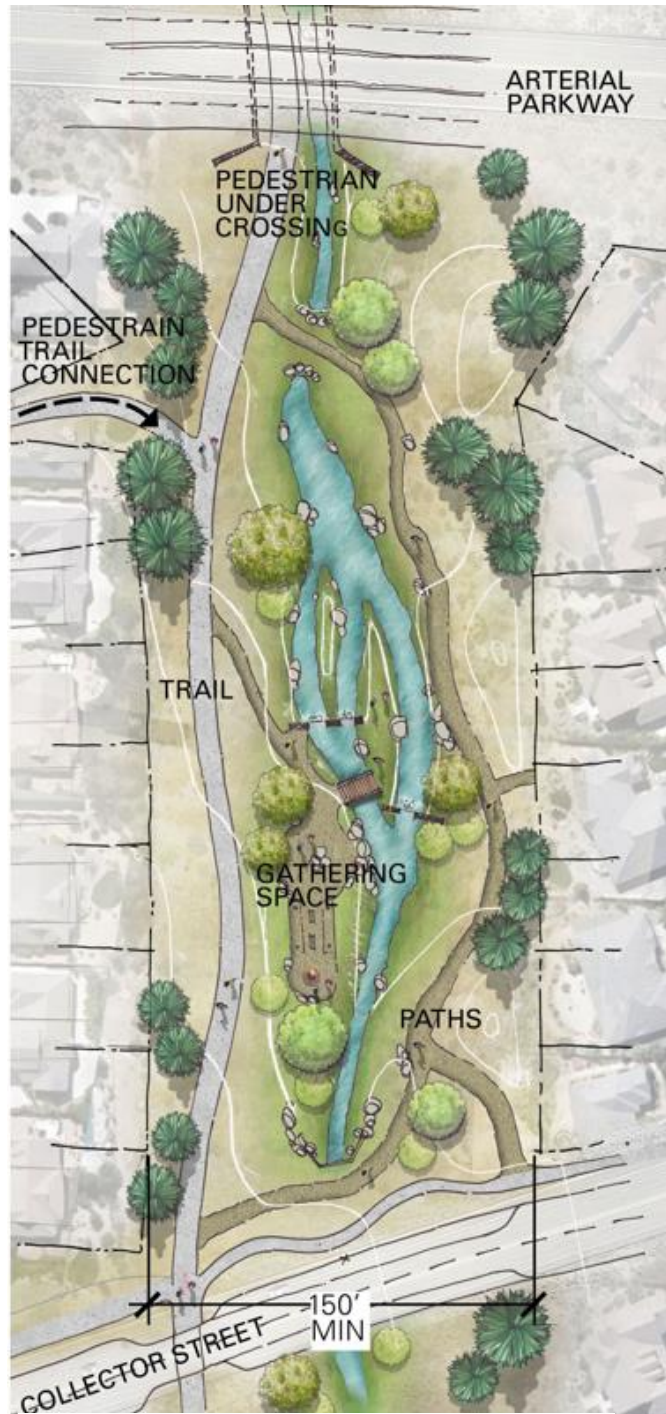
## Community Trail Corridor

The community trail corridors connecting the Chase Canyon and Lost Cabin Trailheads run along the primary drainageway channels to the Neighborhood Center and community park (Figures 25-26). These trail corridors will contain 12-foot-wide asphalt multi-use trails, which will also serve as maintenance access to the drainageways. Along the trail are active pocket parks and a network of secondary soft surface exploration trails. Community program elements such as art, seating and other visual elements will be located, as appropriate, along the trails. Landscape along these trails will be comprised of a mix of a riparian revegetation along the stream channels, wildflower planting, and native vegetation.

## Community Trail Design Standards

Final trail location, design, landscaping, and community program elements will be determined with each special use permit, tentative map, or site improvement permit, as applicable, subject to the following standards:

- 1) Facilities:
  - a) Primary trails shall be 12 feet wide and surfaced with asphalt.
  - b) Secondary trails shall be six feet wide and constructed with native soil material.
- 2) Landscape:
  - a) Landscape along community trails will include clustered street trees planted at a rate of three trees for every 1,000 square feet of area.
  - b) 70 percent of the required trees shall be large trees and 30 percent may be small trees, defined as follows:
    - i) Large deciduous trees shall have a minimum caliper of two and one-half inches, and large evergreen trees shall have a minimum height of ten feet.
    - ii) Small deciduous trees shall have a minimum caliper of one inch and small evergreen trees shall have a minimum height of six feet.
    - iii) Additional trees planted beyond the required minimum tree count are not required to meet the minimum tree size.
  - c) Landscape will include native shrubs and groundcover.
    - i) A minimum of six shrubs shall be planted for every required tree.



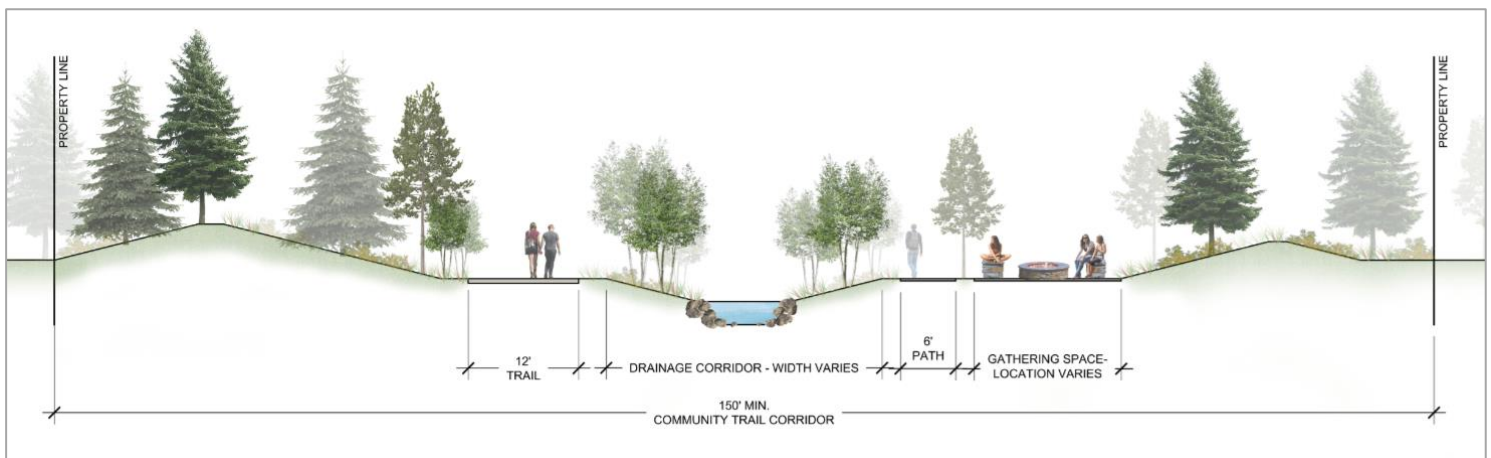
**Figure 25: Community Trail Corridor Concept**



- a) At least 25 percent of the required shrubs shall be a minimum of five-gallon with the remaining 75 percent one-gallon or larger.
- ii) Ground covers must be a minimum of a four-inch pot container size.
- iii) Vines must be a minimum five-gallon container in size.
- iv) Use of turf shall not exceed ten percent.
  - a) Solid sod or grass seed applied with Hydro-Mulch may be used.

When the trail is adjacent to residences, the landscaping shall be a minimum of 60 percent evergreen materials to screen residences.

- 3) Location and design of trails within the 100-year flood line of a major drainageway shall be reviewed and approved at the time of special use permit or tentative map, as applicable.
- 4) Along each community trail corridor, active and passive recreation opportunities will be provided.
  - a) The following lists the required Community trail corridor elements:
    - Multi-use paths
    - Seating areas along trail (benches)
    - Seating areas along stream (formal benches or informal boulder seating)
    - Fitness course elements
    - Turf areas
    - Trash cans
    - Pet waste stations
  - b) The following Community trail corridor elements are optional:
    - Picnic areas
    - Lawn play areas
    - Lawn games: bocce ball, corn hole, board games, outdoor ping pong, etc.
    - Interactive water elements: Weir Walls, Spray Play
    - Art & sculpture



**Figure 26: Typical Community Trail Section**



## Neighborhood Trail Corridor

The neighborhood trail corridors are located central to neighborhoods and connect to the community trail system (Figures 27-28). These corridors will contain eight-foot-wide paths utilizing a mix of asphalt and natural surface trails. Active and passive spaces along each corridor are intended to be an extension of the adjacent residential backyard space with features such as shaded seating and shelters.

## Neighborhood Trail Design Standards

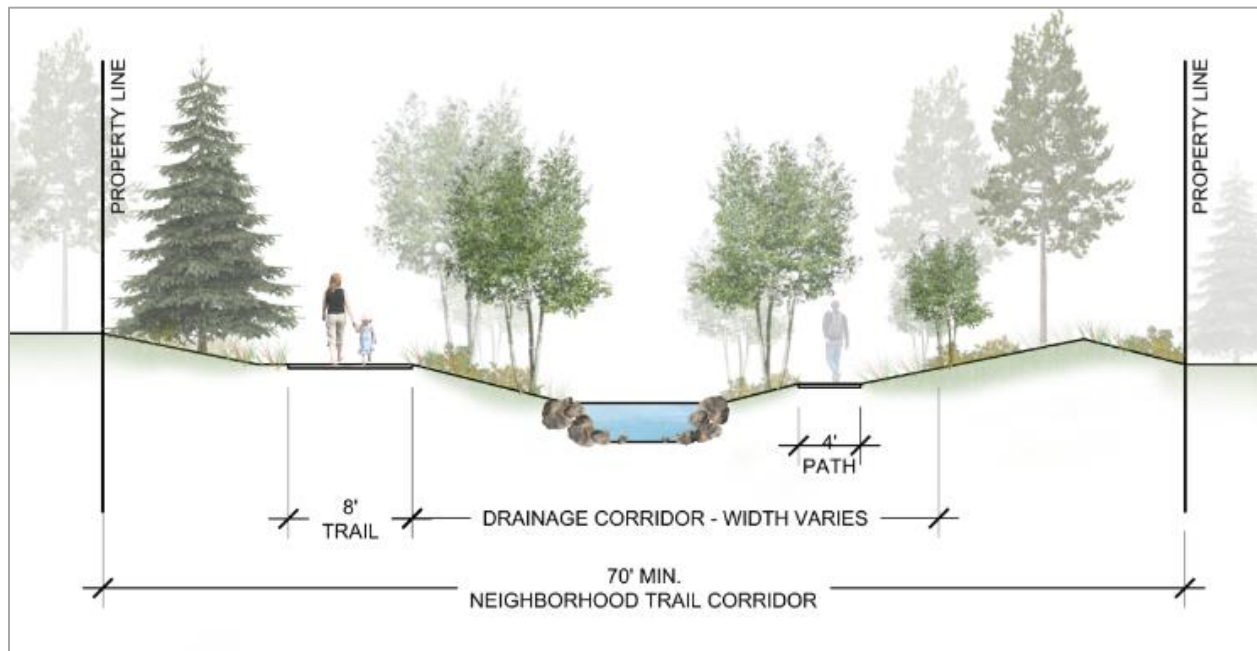
Final neighborhood trail location, design, landscaping, and community program elements will be determined with review and approval of each special use permit, tentative map, or site improvement permit, as applicable, subject to the following standards:

- 1) Facilities:
  - a) Primary trails shall be eight feet wide and surfaced with asphalt.
  - b) Secondary trails shall be a minimum of four feet wide and constructed with native soil material.
- 2) Landscape:
  - a) Landscape along community trails shall include clustered street trees planted at a rate of three trees for every 1,000 square feet of area.
  - b) 70 percent of the required trees shall be large trees and 30 percent may be small trees, defined as follows:
    - i) Large deciduous trees shall have a minimum caliper of two and one-half inches, and large evergreen trees shall have a minimum height of ten feet.
    - ii) Small deciduous trees shall have a minimum caliper of one inch and small evergreen trees shall have a minimum height of six feet.
    - iii) Additional trees planted beyond the required minimum tree count are not required to meet the minimum tree size.
  - c) Landscape shall include native shrubs and groundcover.
    - i) A minimum of six shrubs shall be planted for every required tree.
      - (a) At least 25 percent of the required shrubs shall be a minimum of five-gallon in size with the remaining 75 percent one gallon or larger.
    - ii) Ground covers shall be a minimum



**Figure 27: Neighborhood Trail Corridor Concept**

- four-inch pot container size.
- iii) Vines shall be a minimum five-gallon container in size.
- iv) Use of turf shall not exceed ten percent.
  - (a) Solid sod or grass seed applied with Hydro-Mulch may be used.
- d) When the trail is adjacent to residences, the landscaping shall be a minimum of 60 percent evergreen materials to screen residences.
- 3) Location and design of trails within the 100-year flood line of a major drainageway shall be reviewed and approved at the time of special use permit or tentative map, as applicable.
- 4) Along the Neighborhood trail corridor community program elements will be provided for active and passive recreation opportunities.
  - a) The following lists the required Neighborhood trail corridor elements:
    - Multi-use paths
    - Soft surface “exploration paths”
    - Seating areas along trail (benches)
    - Trash cans
    - Pet waste stations
  - b) The following lists the optional Neighborhood trail corridor elements:
    - Seating areas along stream (formal benches or informal boulder seating)
    - Gathering spaces: Shade structures, fire pits, hammocks
    - Small informal lawn areas
    - Art & sculpture
    - Restrooms
- 5) Prior to the first Certificate of Occupancy within Phase 2, the Master Developer shall be responsible for construction of a multimodal connection between the north (Town Center) parcel and the south (Phase 1 through 5) of the PUD.



**Figure 28: Typical Neighborhood Trail Section**

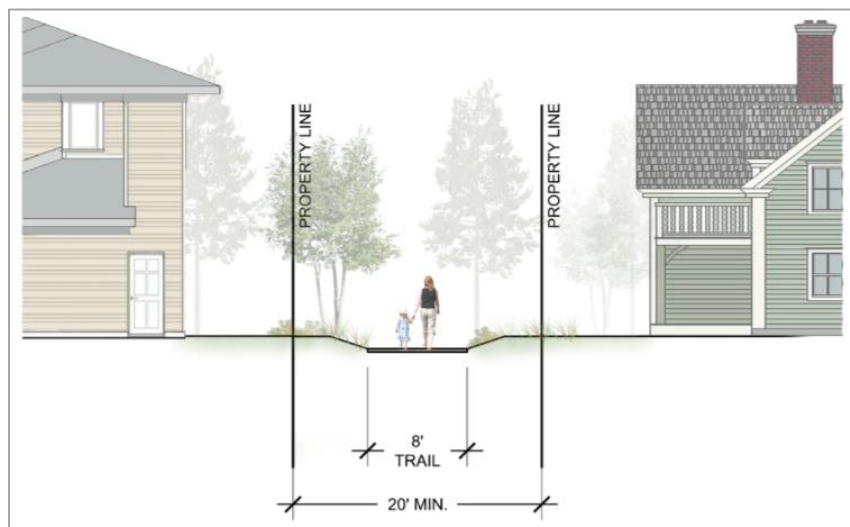
### **Pedestrian Trail Connections**

Pedestrian trail connections will provide direct access from the neighborhoods to the Neighborhood and Community trail corridors via 12-foot-wide paved trails. The Pedestrian Trails will connect to the neighborhoods from the end of cul-de-sacs or between lots along a local street (Figure 29). Pedestrian trail connections will provide screening for adjacent homes through berming and landscaping.

### **Pedestrian Trail Connection Design Standards**

Final pedestrian trail location, design, landscaping, and community program elements will be determined with review and approval of each special use permit, tentative map or site improvement permit, as applicable, subject to the following standards:

- 1) Facilities:
  - a) 12-foot-wide asphalt surface trail.
- 2) Lighting:
  - a) Bollard lighting shall be placed at each trail entry.
  - b) Bollards shall be shielded downward and limited to four feet in height.
- 3) Landscape:
  - a) Landscape along pedestrian trails shall include clustered street trees planted at a rate of three trees for every 1,000 square feet of area.
  - b) 70 percent of the required trees shall be large trees and 30 percent may be small trees, defined as follows:
    - i) Large deciduous trees shall have a minimum caliper of two and one-half inches, and large evergreen trees shall have a minimum height of ten feet.
    - ii) Small deciduous trees shall have a minimum caliper of one inch and small evergreen trees shall have a minimum height of six feet.
    - iii) Additional trees planted beyond the required minimum tree count are not required to meet the minimum tree size.
  - c) Landscape shall include native shrubs and groundcover.
    - i) A minimum of six shrubs shall be planted for every required tree.
      - (a) At least 25 percent of the required shrubs shall be a minimum of five-gallon in size, with the remaining 75 percent one-gallon or larger.
    - ii) Ground covers shall be a minimum of a four-inch pot container in size.
    - iii) Vines shall be a minimum of a five-gallon container in size.
    - iv) Use of turf shall not exceed ten percent.



**Figure 29: Pedestrian Trail Corridor Concept**

- (a) Solid sod or grass seed applied with Hydro-Mulch may be used.
- d) When the trail is adjacent to residences, the landscaping shall be a minimum of 60 percent evergreen materials to screen residences.
- e) Evergreen screening, three-foot-tall berming, low walls, or an alternative screening method along edges will be provided to screen homes from view.
- 4) Along the Pedestrian trail corridors, elements will be provided for active and passive recreation opportunities.
  - a) The following lists the required Pedestrian trail corridor elements:
    - Multi-use paths
    - Seating areas along trail (benches)
    - Berming and screening
    - Bicycle racks
    - Trash cans
    - Pet waste stations
  - b) The following lists the optional pedestrian trail corridor elements:
    - Small informal lawn areas
    - Art and sculpture

## Gathering Space

Gathering space facilities will be located adjacent to neighborhoods within the trail corridor and serve the surrounding neighborhood as an extension of the backyard space.

### Gathering Space Design Standards

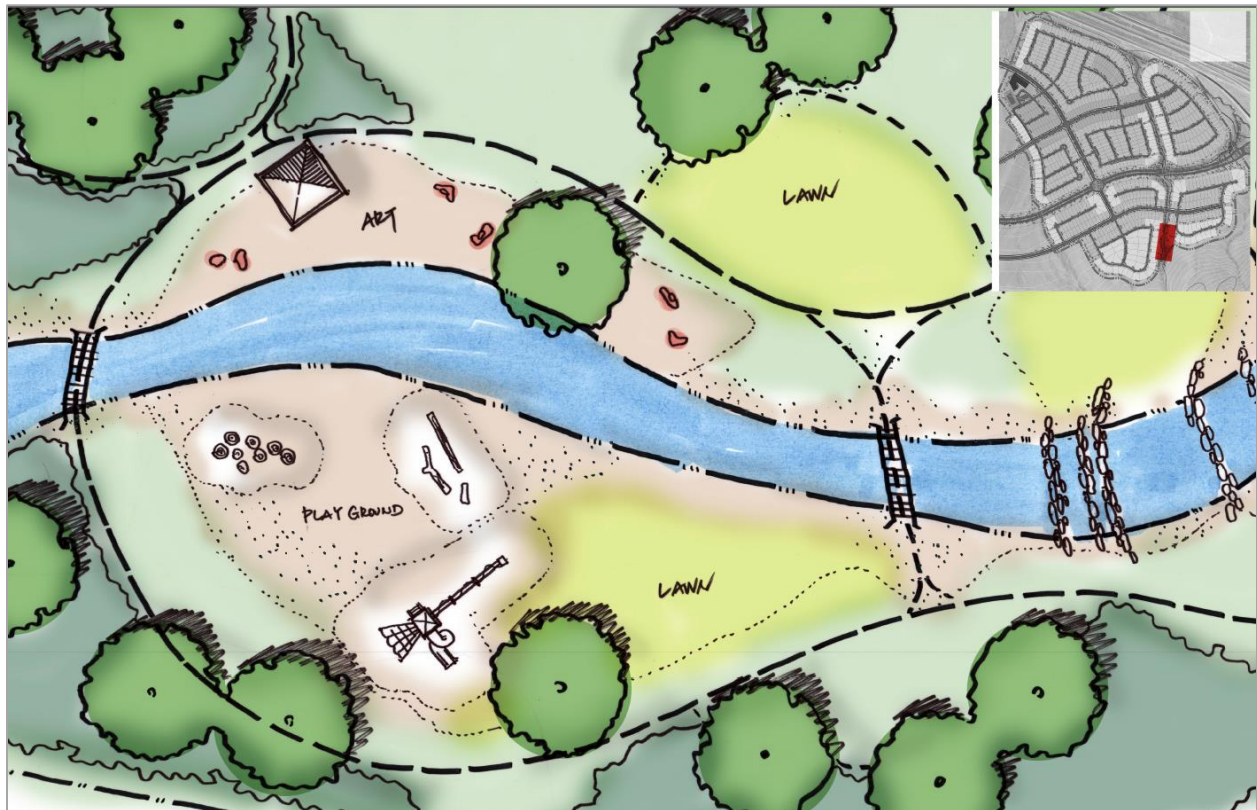
Gathering space location, design, landscaping, and community program elements shall be determined with each special use permit, tentative map, or site improvement permit, as applicable, subject to the following standards:

- 1) Spaces shall be accessed from neighborhood connections, including pedestrian trails.
- 2) Each space shall be unique and offer program amenities that support the adjacent neighborhood.
- 3) Spaces shall be located within and connected to the community and neighborhood trail system. Trails should not run through the center of active spaces.
  - a) Spaces shall be a minimum of 300 square feet in size, and landscaped according to size.
- 4) Landscape:
  - a) Landscape along community trails shall include clustered street trees planted at a rate of one tree for every 300 square feet of usable area.
  - b) 70 percent of the required trees shall be large trees and 30 percent may be small trees, defined as follows:
    - i) Large deciduous trees shall have a minimum caliper of two and one-half inches, and large evergreen trees shall have a minimum height of ten feet.
    - ii) Small deciduous trees shall have a minimum caliper of one inch and small evergreen trees shall have a minimum height of six feet.
    - iii) Additional trees planted beyond the required minimum tree count are not required to meet the minimum tree size.
  - c) Landscape shall include native shrubs and groundcover.
    - i) A minimum of six shrubs shall be planted for every required tree.
      - (a) At least 25 percent of the required shrubs shall be a minimum five-gallon in size, with the remaining 75 percent one-gallon or larger.
    - ii) Ground covers shall be a minimum of four-inch pot container size.
    - iii) Vines shall be a minimum of a five-gallon container in size.
    - iv) Use of turf shall not exceed ten percent.
      - (a) Solid sod or grass seed applied with Hydro-Mulch may be used.
  - d) When the trail is adjacent to residences, the landscaping shall be a minimum of 60 percent evergreen materials to screen residences.
- 5) Along the gathering space areas, elements will be provided for active and passive recreation opportunities.
  - a) The following lists the required site amenities required for a gathering space.
    - Small informal nature play elements
    - Ground plane games, such as bocce ball, horseshoes, bean bags, or a similar alternative
    - Single use shelters
    - Sitting areas
    - Trash receptacles
  - b) The following lists the optional gathering space elements:
    - Dog park features
    - Informal open lawn spaces
    - Picnic tables and BBQ areas



- Interpretive walks and signage
- Drinking fountains
- Nature gardens

A number of trail amenities and elements have been described as either required or optional in the trail design standards. The intent is to create a pedestrian environment that is rich with both passive and active recreational uses. The outdoor amenities provide for a more active use of the trail system, without going so far as to be a full park setting. Figure 31 - Examples of Recreational Opportunities along Trail Corridors, provides examples of the types of amenities that will be integrated through the StoneGate trails and parks system.



**Figure 30: Typical Gathering Space**



**Figure 31: Examples of Recreational Opportunities along Trail Corridors**



### Chase Canyon Trailhead

This trailhead will be located near Chase Canyon (Figure 23 and 33). Parking will be provided for cars with trails constructed to provide access to an overlook tower and stargazing deck (Figures 35-37). Picnic and trailhead facilities will be provided along the riparian corridor. A pedestrian trail connection will be made to the primary community trail linking this trailhead to the Neighborhood Center and central park amenities.

- 1) A minimum of four equestrian parking spaces shall be provided measuring a minimum of 18 feet wide by 55 feet long.



Example of pedestrian bridge

### Lost Cabin Trailhead

This trailhead will be located along the south border of the site below the existing springs (Figure 23). This trailhead will provide access to the Lost Cabin interpretive site and access to National Forest Service Land off-site (Figure 22). The cabin will provide public restrooms and water.



Example of reuse of native materials

### Trailhead Design Standards

Final locations, design, landscaping, grading, parking, and program elements will be determined with the first tentative map or special use permit, as applicable, located adjacent to each of these trailheads, subject to the following standards:

- 1) Facilities: eight-foot-wide asphalt trail at the entry.
- 2) A minimum of ten parking spaces will be provided at Trailheads. Parking areas will be gravel. A minimum of one ADA space on a concrete pad is required.
- 3) Public restrooms and trash receptacles are required.
- 4) Trailhead elements shall include a minimum of five of the following amenities:
  - Multi-use paths



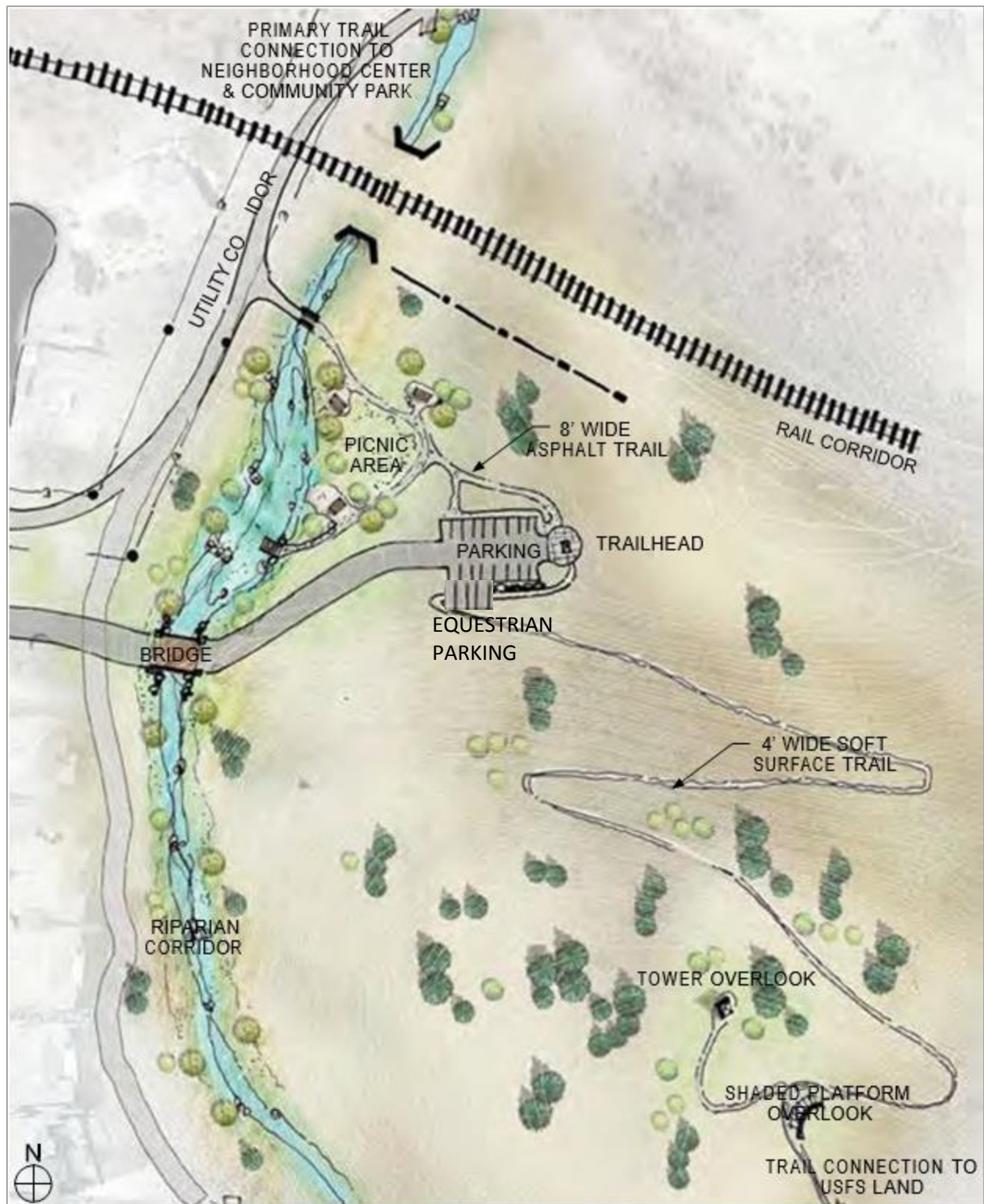
Example of interpretive signage



Example of natural pathways.

**Figure 32: Examples of Trailhead Elements**

- Trailheads with signage
- Picnic Areas
- Natural playground features
- Interpretive areas and signage
- Towers and Overlook areas
- Gathering Space, Shade Structures, Spaces for Stargazing



**Figure 33: Chase Cabin Trailhead Illustrative Site Plan**





**Figure 34: Lost Cabin Trailhead Illustrative Site Plan**

The scenic overlook, stargazing platforms, shade platform, and lookout towers have been designed to create an architectural feature that ties in with theme of StoneGate. The intent is to create areas for pedestrian activity that capture the open space, historic elements, and scenic views of the area. Final design, size, location, and timing of the amenities will be reviewed and approved at the time of special use permit or tentative map, as applicable.

### **Scenic Overlook Amenities**

The StoneGate community offers views of the scenic Peavine Mountains and surrounding chaparral landscape. To capitalize on and provide better access to these signature views, several concepts were developed. These would provide gathering and respite places accessible by the community trail system. Composed of stone, wood, and metal, the structures fit in with site elements, signage, buildings, and gates throughout the site. They offer a unique amenity that further connects the residents to the natural features of the site.

#### **Stargazing Platform**

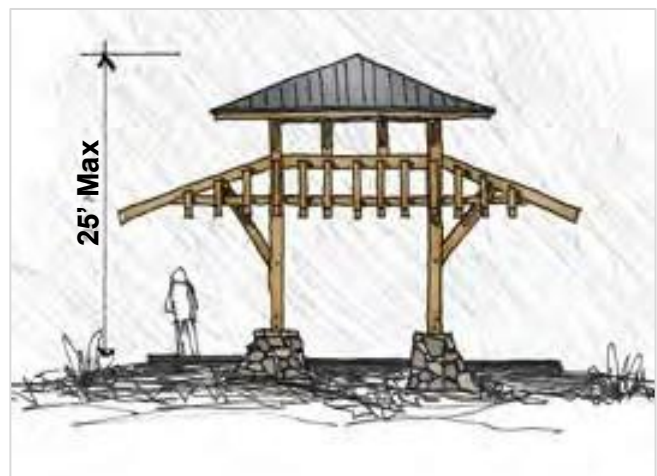
Taking advantage of the darkened skies, the stargazing platform offers the community a place for unobstructed views of the night sky. They invite residents with an accessible, level space on the hillside, low walls for screening from the wind, and small integrated signage offering constellation guides and history.



**Figure 35: Stargazing Platform**

#### **Shade Platform**

A smaller and accessible interpretation of the lookout tower, the shaded platform provides the community with a protected place to gather or rest. The profile of these structures is inspired by that of the lookout towers.



**Figure 36: Shade Platform**

### Lookout Tower

The lookout tower concept has been interpreted from the historic fire lookouts that are found throughout the mountain ranges of the American West. The tower offers a profile that will be visible from a distance and a place for the community to capture scenic views that would not be otherwise accessible.



*Figure 37: Lookout Tower*

## **no. Community Amenities**

### Neighborhood Center

The 12-acre Neighborhood Center will provide amenities and services to local residents, including, but not limited to: office, retail restaurants, a community center with pool, and outdoor amphitheater. These uses are centralized around local gathering spaces including fire pits, water fountains, and outdoor dining. The Community Center will be open to the general public for recreational uses such as volleyball, bocce ball, sports rentals, pool, and an outdoor amphitheater. For special events, such as weddings, an outdoor kitchen will be available for rental to residents and the general public. The center will connect to the primary community trail. The community amenities to be provided will be reviewed and approved at the time that development of this use is proposed. Construction of the improvements will be phased with the development of Planning Area 3 and is anticipated to be constructed by the fourth tentative map submittal for Phase 3. The HOA will own and maintain the Neighborhood Center amenities including the community center, amphitheater, pool, gardens, parking, landscaping, BBQ pits, community park amenities, and other common areas. The neighborhood commercial areas will be privately owned and constructed based on the market demand. Non-residential buildings shall comply with the design standards of this handbook.



## Community Park

The community park (Figure 38) will be a minimum of 12 acres and is strategically located to maximize recreational value at the confluence of the two on-site drainage channels. The community park serves as the hub of the trails system and provides public parking. Elements such as picnic areas, pavilions, play areas, shelters, and interactive water elements will be provided. The park will connect to the Neighborhood Center via two of the primary community trails. The specific community amenities will be reviewed and approved at the time development of the use is proposed and will be reviewed through the tentative map, special use permit, or site improvement permit, as applicable. Construction of the improvements will be completed as part of Phase 2 and must be completed prior to any application for any development of Phase 3. City of Reno approvals for RCT credits are outlined in the implementation section of the Handbook.



**Figure 38: Community Park Concept**

## Community Park Design Standards

The Community Park will be constructed by the Master Developer, be available for use by the general public, be maintained by the HOA, and is subject to the following standards:

Final locations, design, landscaping, grading, parking, and program elements shall be determined at the time of special use permit, tentative map or site plan improvement.

Community Park program elements shall include the following:

- Play structures (age appropriate structures for 2-5 and 5-12 year olds)
- Game Courts – basketball, volleyball, tennis, or combination thereof
- Open lawn area that is approximately 1.5 acres in size
- Group picnic shelters
- Water play/splash pad
- Sitting areas
- Restrooms, drinking fountains, and trash receptacles
- Parking lots (minimum of 20 spaces)
- Internal trails
- Security lighting
- Formal sport fields shall include at least two regulation fields suitable for Little League baseball or softball, or one large turf area which can accommodate two fields measuring a minimum of 65 yards x 110 yards. (note: if not included then 18 percent of total RCT will be retained by City for construction of formal sports fields elsewhere in Park District 1).

Optional Community Park program elements may also include:

- ~~Formal sport fields shall include at least two regulation fields suitable for Little League baseball or softball, or one large turf area which can accommodate two fields measuring a minimum of 65 yards x 110 yards (note: if not included then 18 percent of total RCT will be retained by City for construction of formal sports fields elsewhere in Park District 4).~~
- Exercise trails and courses
- Overlook shelters
- Interpretive areas
- Nature and interpretive trails

## pe. Landscape Design Standards

- 1) Landscape plans are subject ARC review. All reviewed and approved landscape plans requiring ARC review must be stamped by the ARC prior to submitting to the City of Reno for a building permit.
- 2) Minimum Landscape area requirements shall include the following:
  - a) Single Family Residential – Required front yard
    - i) Lawn/turf area in the front yard shall be limited to ten percent of the front yard landscaping.
  - b) Multi-family Residential – 20 percent of site
  - c) Neighborhood Center – 20 percent of site
  - d) Town Center – 15 percent of site
  - e) Industrial – Entire front yard
  - f) Public Facility uses – 20 percent of site



- 3) Landscaping shall be in conformance with RMC Section 18.12.12, Landscaping and Screening, as amended.
- 4) A tree preservation plan shall be submitted for review with the first tentative map in Phase 4. The plan shall identify where mature trees exist, where development may occur, where trees shall be preserved, and where construction is expected to adversely impact mature healthy trees in conformance with RMC Section 18.12.501-508, Tree Protection, as amended. The intent is to utilize alternative design techniques, such as cluster development to preserved trees in phase 4.
  - a) The plan shall identify the species, location, and size of all existing trees measuring greater than six-inch caliper in size and which trees are to be removed.
  - b) For each tree removed, they shall be replaced with a minimum of deciduous trees of a minimum caliper of two and one-half inches and evergreen trees with a minimum height of ten feet.
  - c) The maximum tree penalty is 30 percent.
- 5) 80 percent of the total trees shall be noncolumnar.
- 6) The Handbook shall include an approved tree and plant species list for all residential front yards.
  - a) Refer to Appendix H – StoneGate Plant List for Residential Front Yards, for a list of all approved tree and plant species.

#### **pg. Defensible Space/Wildland Interface**

The project is directly adjacent to National Forest property with a potential threat of wildfires, especially during periods of drought. To minimize potential wildfires and increase the homes' survivability in a fire, final development plans will conform to the City of Reno's Defensible Space standards.

Defensible space refers to the area between a home and an oncoming wildfire where the vegetation has been modified to reduce the wildfire threat and which provides an opportunity for fire fighters to effectively defend the home. The key component is reducing the amount of flammable vegetation surrounding the home and increasing the moisture content of the vegetation with irrigation. It is especially important to modify the vegetation around homes between the developed areas and open spaces. A Defensible Space/Wildland Urban Interface Plan will be reviewed and approved by the City of Reno Fire Department and will include the following standards:

#### **Standards**

A defensible space and wildland interface program for both the common open space and individual lots will be established by the Master Developer, as a part of the CC&Rs and reviewed/enforced by the HOA.

## 19. Streets

Streets within the StoneGate Community include arterials, collectors, neat, and local streets. Specific bike lane standards are located after the local street design standards section of this handbook. Street sections located on the south side of U.S. 395 incorporate Low Impact Development (LID) standards that replace the use of curb and gutter with open swale systems. The Town Center street sections are designed for a more urban setting and include curb and gutter and wide pedestrian walkways, intended to accommodate the retail, commercial and public facility uses.

See Figure 39 for the street design standards table and Figure 40 for the location of each street type. **Final design of all streets shall be in conformance with the street design standards outlined in this Handbook, as determined with review of the associated tentative map, special use permit, building, or grading permit, as applicable.**

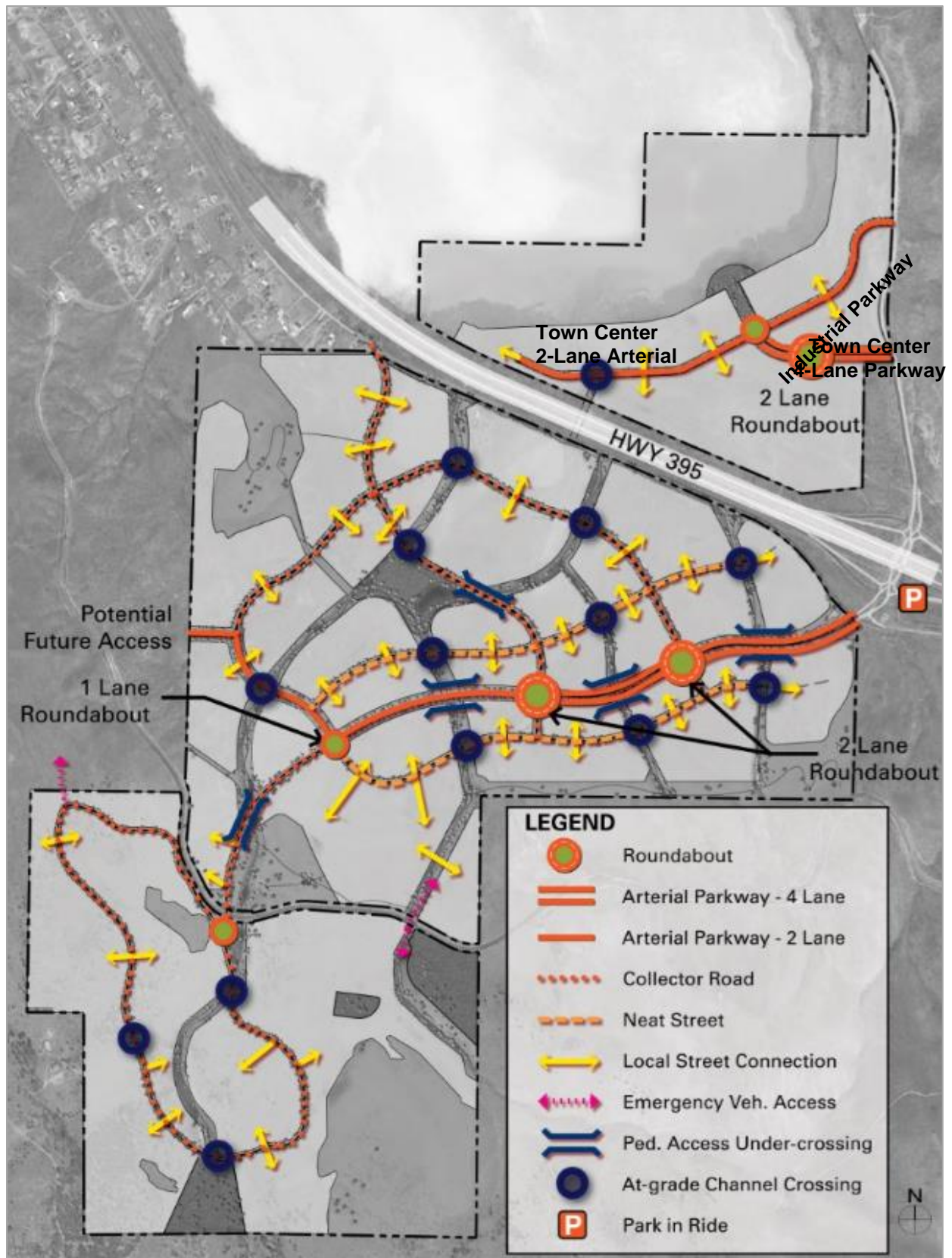
### Street Design Standards

<b>Figure 39: Street Design Standards Table</b>								
<b>Street Type</b>	<b>Total Street Width</b>	<b>Total ROW</b>	<b>Travel Lane Width</b>	<b>Median</b>	<b>Bike Lane</b>	<b>Sidewalk</b>	<b>Parking</b>	<b>Landscape /Drainage Corridor</b>
Arterial Parkway (4-Lane)	182 feet	62 feet	12 feet	20 feet	6 feet lane-both sides	None	None	50 feet-both sides
Arterial Parkway (2-Lane Divided)	160 feet	40 feet	13 feet	20 feet	6 feet lane-both sides	None	None	50 feet- both sides
Arterial Parkway (2-Lane Undivided)	137 feet	37 feet	12 feet	None	6 feet lane-both sides	None	None	50 feet-both sides
Collector	97 feet	37 <del>43</del> feet	12 feet	None	6 feet lane-both sides	6 feet meandering path- one side	None	30 feet-both sides
Neat Street	64 feet	46 feet	10 feet	None	5 feet lane-both sides	6 feet walks both sides	9 feet - one side (upslope)	12 feet- drainage corridor (downslope)
Local Street	47 feet	37 feet	10.5 feet	None	None	6 feet walk one side (upslope)	9 feet - one side (upslope)	10 feet- drainage corridor (downslope)

Street Type	Total Street Width	Total ROW	Travel Lane Width	Median	Bike Lane	Sidewalk	Parking	Landscape /Drainage Corridor
Town Center 4-Lane Arterial Parkway	115 feet	<del>62</del> 415 feet	12 feet	20 feet	6 feet lane-both sides	8 feet meandering walk on high school side. 4 feet meandering walk on opposite side	None	20 feet wide corridor on high school side. 13 feet corridor on opposite side
Town Center 2-Lane Arterial Parkway	102 feet	<del>50</del> 402 feet	12 feet	12 feet	4 feet lane-both sides	6 feet meandering walk on both sides	8 feet on both sides	20 feet landscape corridor on both sides
Industrial Parkway	90 feet	<del>38</del> 90 feet	12 feet	12 feet	6 feet lane-both sides	6 feet meandering walk on both sides	None	20 feet landscape corridor on both sides

The AASHTO is a standard setting body that publishes specifications and quality control protocols and guidelines, which are used in roadway design. The guidelines set recommendations for a defined “clear zone”, or unobstructed, relatively flat area beyond the edge of the traveled way that allows a driver to stop safely or regain control of a vehicle that leaves the traveled way.

- 1) All street sections shall comply with AASHTO recommendations for clear zones.
- 4)2) The depth and width of all drainage areas shall be in compliance with AASHTO recommendations for clear zones and other pertinent City Code and PWDM standards, as applicable
- 2)3) Landscaping permitted within the clear zone of roads designed without curb and gutter, shall include the following types of plants and materials:
  - a) Shrubs under 30 inches in height
  - b) Native grasses
  - c) Ground covers
  - d) Mulch
- 3)4) Landscaping and amenities prohibited within the clear zone of roads designed without curb and gutter, shall include the following:
  - a) Boulders
  - b) Trees measuring larger than four inches in diameter, measured at six inches above the ground upon maturity.
  - c) Signs, light poles, utility boxes and mailboxes (unless designed utilizing approved breakaway standards).
- 4)5) Drainage swales adjacent to the Neat and Local Streets shall be limited to six inches in depth.
- 5)6) Drainage corridors located along the Arterial and Collector Streets shall vary in depth and width and capture street runoff.
- 6)7) Spray irrigation shall be prohibited within six feet of the edge of pavement.



**Figure 40: Circulation Master Plan**

#### **Four Lane Arterial Parkway**

The arterial parkway will be the vehicular spine of the StoneGate development. The roadway shall be four lanes wide, separated by a 20-foot landscape median and grade separation. Three roundabouts shall control traffic and provide access to community collector streets. Gateway and wayfinding signs shall be provided in the roundabouts. The parkways shall not include sidewalks, as pedestrian circulation shall be provided along the collector, neat and local streets, and internal trail system. As discussed below, both sides of the roadway include berming and drainageways, ornamental landscape and street trees, as well as buffering, and screening for the homes that back onto the roadway. The parkway shall contain a six-foot-wide bike lane on both sides to encourage bike commuting and on-street cycling.

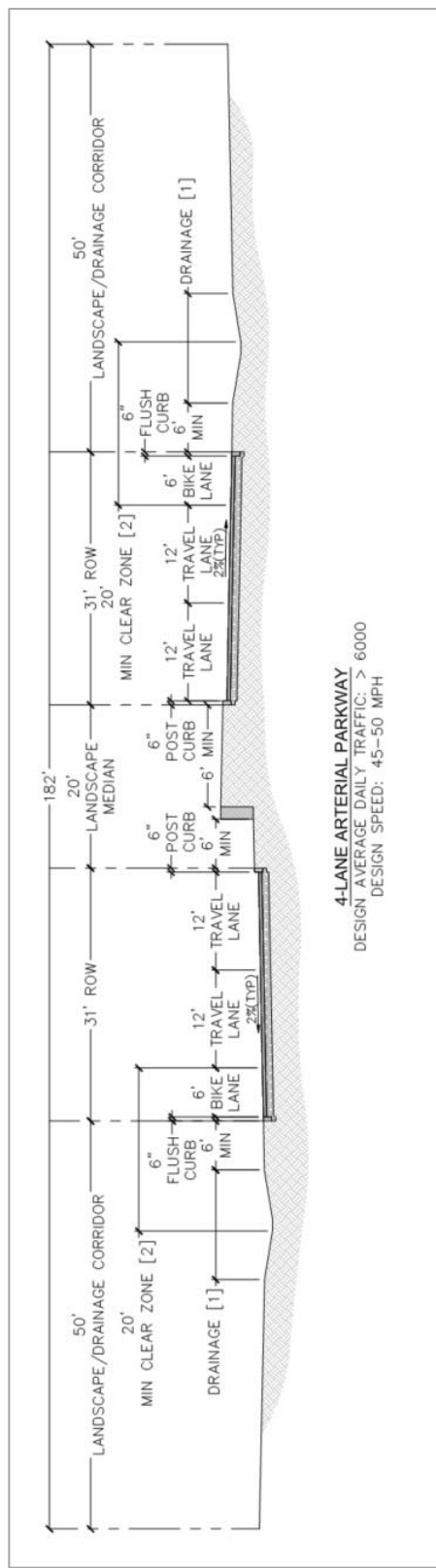
#### **Four Lane Arterial Parkway – Design Standards**

**The Master Developer shall be responsible for the construction of the four lane arterial parkway, associated roundabouts, and the right of way improvements per Figures 39 and 41, and the following standards:**

- 1) This street shall be constructed without curb and gutter to promote water runoff into drainage channels.
  - a) A geotechnical engineer shall provide recommendations for treatment of shoulders of roadways, which will avoid drainage from roadways infiltrating into base or subgrade of roadway sections.
- 2) On-street parking shall not be permitted on the arterial parkway.
- 3) Direct driveway access to residences shall not be permitted on the arterial parkway.
- 4) Intersections along the arterial parkway shall include landscaped gateways and signage to neighborhoods, subject to the gateway and sign standards in this PUD.
- 5) The landscape areas along the roadway and within the median shall be subject to the following standards.
  - a) Landscape shall include clustered street trees planted at a rate of one tree for every 300 square feet of required landscape area.
  - b) 10 percent of the required trees shall be extra-large trees, 60 percent of the required trees shall be large trees and 30 percent may be small trees, defined as follows:
    - i. Extra-large deciduous trees shall have a minimum caliper of three and one-half inches, and extra-large evergreen trees shall have a minimum height of twelve feet.
    - ii. Large deciduous trees shall have a minimum caliper of two and one-half inches, and large evergreen trees shall have a minimum height of ten feet.
    - iii. Small deciduous trees shall have a minimum caliper of one inch and small evergreen trees shall have a minimum height of six feet.
  - c) Landscape shall include ornamental native shrubs and groundcover.
    - i. A minimum of six shrubs shall be planted for every required tree.
      1. At least 25 percent of the required shrubs shall be a minimum five-gallon in size with the remaining 75 percent one-gallon or larger.
    - ii. Ground covers must be a minimum of four-inch pot container size.
    - iii. Vines must be a minimum five-gallon container in size.
  - d) Use of turf shall not exceed ten percent of required landscape area.
    - i. Turf areas shall not be permitted directly adjacent to roadway sections.
    - ii. Solid sod or grass seed applied with Hydro-Mulch may be used.
  - e) All utilities shall be screened with landscape from view of the roadway.



- 6) Design of the arterials shall be in accordance with the City of Reno Public Works Design Manual with the above exceptions.
  - 7) An Operations and Maintenance ("O&M") Manual of all drainage improvements shall be prepared and approved by the City prior to approval of a Site Improvement Permit.
  - 8) The City of Reno shall own and maintain all storm drain infrastructure within, ~~including infrastructure that may fall outside~~ the public ROW.
    - a) ~~The Master Developer will provide permanent storm drain easements dedicated to the City where public storm drain infrastructure is located outside of ROW.~~
  - 9) The Master Developer or Drainage Association ~~Homeowner's Association~~ shall own and maintain all drainage improvements in the landscape corridors, up to the grate of public catch basins.
    - a) Landscape drains, such as underdrains, shall be owned and maintained by the Master Developer or Drainage Association ~~Home Owner's Association~~.
-



**Figure 41: Typical 4 Lane Arterial Parkway Rendering**

[1] Drainage swales/channels will be designed in accordance with Truckee Meadows Regional Drainage Manual Standards for conveyance of storm water runoff and Truckee Meadows Structural Controls Design and Low Impact Development Manual.

[2] Clear zones are to be in compliance with AASHTO Roadside Design Guidelines. Average Daily Traffic (ADT) and design speed will determine clear zone widths. Landscaping within the clear zones shall be traversable and in compliance with AASHTO Roadside Design Guidelines. Spray irrigation is not allowed within six feet of the edge of pavement.

## **Two Lane Arterial Parkway**

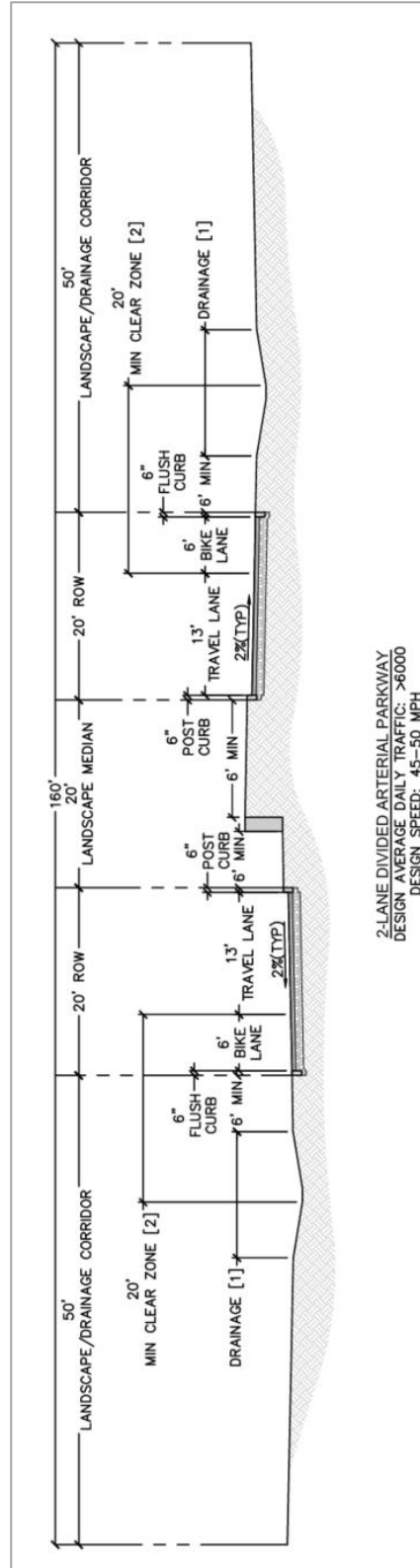
The two-lane arterial parkway shall begin west of the second arterial roundabout. The roadway shall transition to two lanes with median and grade separation. The section that passes under the railroad crossing, shall be reduced to an undivided 37-foot right-of-way width. Both sides of the roadway shall include a combination of berming and drainageways, ornamental landscape, and street trees as well as buffering and screening for the homes that back onto the roadway. The parkway shall include a six-foot-wide bike lane on both sides to encourage bike commuting and on-street cycling. Sidewalks shall not be included, as pedestrian circulation shall be provided along the collector, neat and local streets, and the internal trail system. See Figures 39, 42 & 43 for the Street Design standards.

## **Two Lane Arterial Parkway Design Standards**

**The Master Developer shall be responsible for the construction of the two-lane arterial parkway, associated roundabouts, and right-of-way improvements per the following standards:**

- 1) This street shall be constructed without curb and gutter to promote water runoff into drainage channels.
  - a) A geotechnical engineer shall provide recommendations for treatment of shoulders of roadways, which shall avoid drainage from roadways infiltrating into base or subgrade of roadway sections.
- 2) On-street parking shall not be permitted on the arterial parkway.
- 3) Driveway access to residences shall not be permitted on the arterial parkway.
- 4) Intersections along the arterial parkway shall include landscaped gateways and signage to neighborhoods, subject to the gateway and sign standards in this PUD.
- 5) The landscape areas along the roadway and within the median shall be subject to the following standards.
  - a) Landscape shall include clustered street trees planted at a rate of one tree for every 300 square feet of required landscape area.
  - b) 10 percent of the required trees shall be extra-large trees, 60 percent of the required trees shall be large trees and 30 percent may be small trees, defined as follows:
    - i. Extra-large deciduous trees shall have a minimum caliper of three and one-half inches, and extra-large evergreen trees shall have a minimum height of twelve feet.
    - ii. Large deciduous trees shall have a minimum caliper of two and one-half inches, and large evergreen trees shall have a minimum height of ten feet.
    - iii. Small deciduous trees shall have a minimum caliper of one inch and small evergreen trees shall have a minimum height of six feet.
  - c) Landscape shall include ornamental native shrubs and groundcover.
    - i. A minimum of six shrubs shall be planted for every required tree.
      1. At least 25 percent of the required shrubs shall be a minimum five-gallon in size with the remaining 75 percent one-gallon or larger.
    - ii. Ground covers must be a minimum four-inch pot container size.
    - iii. Vines must be a minimum five-gallon container in size.
  - d) Use of turf shall not exceed ten percent of the required landscape area.
    - i. Turf areas shall not be permitted directly adjacent to roadway sections.
    - ii. Solid sod or grass seed applied with Hydro-Mulch may be used.
  - e) All utilities shall be screened with landscape from the view of the roadway.

- 6) Design of the roadways shall be in accordance with the City of Reno Public Works Design Manual with the above exceptions.
- 7) An Operations and Maintenance ("O&M") Manual of all drainage improvements shall be prepared and approved by the City prior to approval of a Site Improvement Permit.
- 8) The City of Reno shall own and maintain all storm drain infrastructure ~~\_, including infrastructure that may fall outside th~~within the public ROW.
  - a) ~~The Master Developer will provide permanent storm drain easements dedicated to the City where public storm drain infrastructure is located outside of ROW.~~
- 9) The Master Developer or Drainage Association ~~Homeowner's Association~~ shall own and maintain all drainage improvements in the landscape corridors, up to the grate of public catch basins.
  - a) Landscape drains, such as underdrains, shall be owned and maintained by the Master Developer or Drainage Association ~~Home Owner's Association~~.

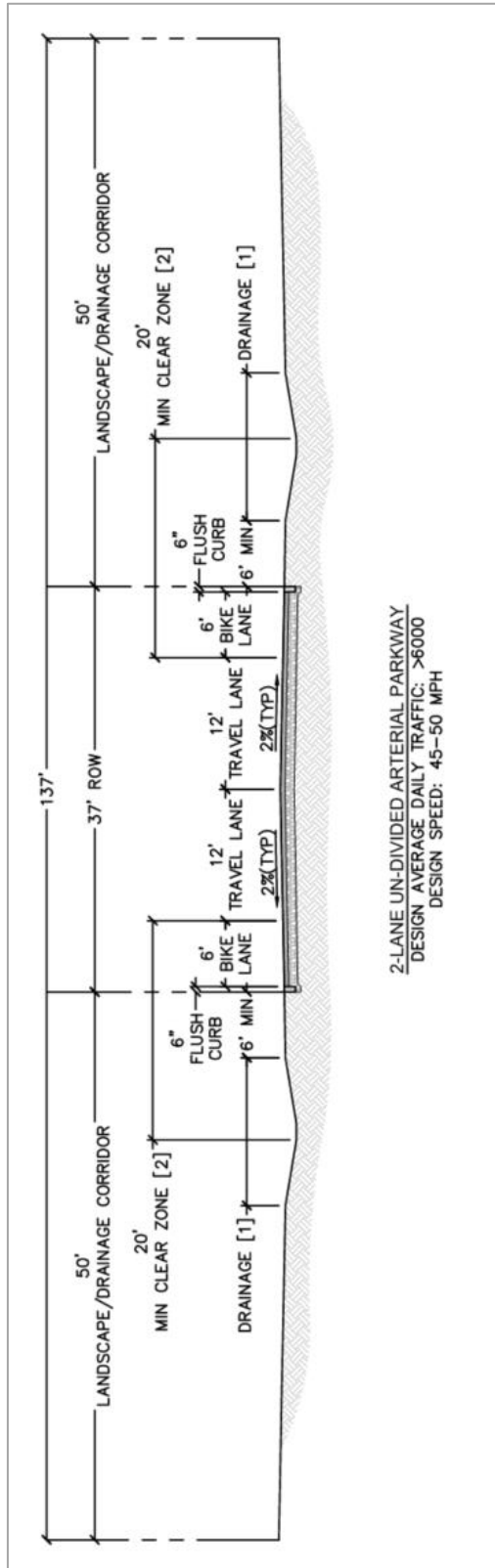


[1] Drainage swales/channels will be designed in accordance with Truckee Meadows Regional Drainage Manual Standards for conveyance of storm water runoff and Truckee Meadows Structural Controls Design and Low Impact Development Manual.

[2] Clear zones are to be in compliance with AASHTO Roadside Design Guidelines. Average Daily Traffic (ADT) and design speed will determine clear zone widths. Landscaping within the clear zones shall be traversable and in compliance with AASHTO Roadside Design Guidelines. Spray irrigation is not allowed within six feet of the edge of the pavement.

**Figure 42: Typical 2 Lane Divided Arterial Parkway Street Section**





**Figure 43: Typical 2 Lane Undivided Arterial Parkway Street Section**

[1] Drainage swales/channels will be designed in accordance with Truckee Meadows Regional Drainage Manual Standards for conveyance of storm water runoff and Truckee Meadows Structural Controls Design and Low Impact Development Manual.

[2] Clear zones are to be in compliance with AASHTO Roadside Design Guidelines. Average Daily Traffic (ADT) and design speed will determine clear zone widths. Landscaping within the clear zones shall be traversable and in compliance with AASHTO Roadside Design Guidelines. Spray irrigation is not allowed within six feet of the edge of the pavement.

## Collector Streets

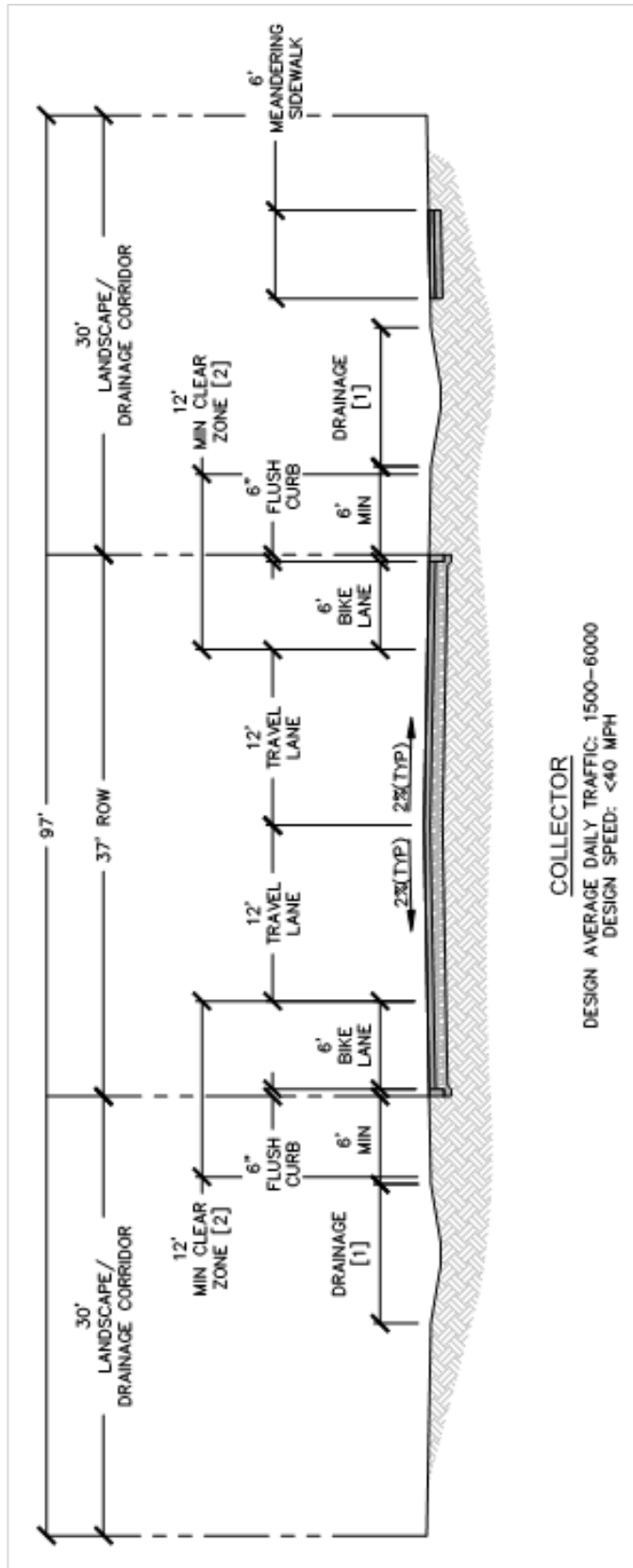
The collector roadways shall connect to the arterial parkways and shall be the primary access roads into the neighborhoods. The collectors shall provide a six-foot-wide bike lane on each side to encourage bike commuting and on-street cycling. A multiuse trail shall be on the uphill side of the roadway and a drainage channel on the downhill side of the roadway. Both sides of the roadway shall include street trees, ornamental landscape, and berming and screening located between the rear yards of homes and the roadway. Direct driveway access to homes fronting collectors and on-street parking shall not be permitted. Refer to Figures 39 and 44 for Street Design standards.

## Collector Street Design Standards

**The Master Developer shall be responsible for the construction of the collector streets, associated intersections, and the landscape and drainageway corridor improvements, per the following standards.**

- 1) Collector streets shall be constructed without curb and gutter to promote water runoff into drainage channels.
  - a) A geotechnical engineer shall provide recommendations for treatment of shoulders of roadways, which shall avoid drainage from roadways infiltrating into base or subgrade of roadway sections.
- 2) Direct driveway access to residences shall not be permitted.
- 3) On-street parking shall not be permitted on collectors.
- 4) The landscape areas along the roadway and within the median shall be subject to the following standards.
  - a) Landscape shall include clustered street trees planted at a rate of one tree for every 300 square feet of required landscape area.
  - b) 10 percent of the required trees shall be extra-large trees, 60 percent of the required trees shall be large trees and 30 percent may be small trees, defined as follows:
    - i. Extra-large deciduous trees shall have a minimum caliper of three and one-half inches, and extra-large evergreen trees shall have a minimum height of twelve feet.
    - ii. Large deciduous trees shall have a minimum caliper of two and one-half inches, and large evergreen trees shall have a minimum height of ten feet.
    - iii. Small deciduous trees shall have a minimum caliper of one inch and small evergreen trees shall have a minimum height of six feet.
  - c) Landscape shall include ornamental native shrubs and groundcover.
    - i. A minimum of six shrubs shall be planted for every required tree.
      1. At least 25 percent of the required shrubs shall be a minimum five-gallon in size with the remaining 75 percent one-gallon or larger.
    - ii. Ground covers must be a minimum of four-inch pot container size.
    - iii. Vines must be a minimum of a five-gallon container in size.
  - d) Use of turf shall not exceed ten percent of the required landscape area.
    - i. Turf areas shall not be permitted directly adjacent to roadway sections.
    - ii. Solid sod or grass seed applied with Hydro-Mulch may be used.
  - e) All utilities shall be screened with landscape from the view of the roadway.
- 5) Design of the collector roadways shall be in accordance with the City of Reno Public Works Design Manual with the above exceptions.
- 6) An Operations and Maintenance ("O&M") Manual of all drainage improvements shall be prepared and approved by the City prior to approval of a Site Improvement Permit.
- 7) The City of Reno shall own and maintain all storm drain infrastructure ~~including~~ infrastructure that may fall outside within the public ROW.

- ~~a) The Master Developer will provide permanent storm drain easements dedicated to the City where public storm drain infrastructure is located outside of ROW.~~
- 8) The Master Developer or Drainage Association ~~Homeowner's Association~~ shall own and maintain all drainage improvements in the landscape corridors, up to the grate of public catch basins.
  - a) Landscape drains, such as underdrains, shall be owned and maintained by the Master Developer or Drainage Association ~~Home Owner's Association~~.



**Figure 44: Typical Collector Street Section**

[1] Drainage swales/channels will be designed in accordance with Truckee Meadows Regional Drainage Manual Standards for conveyance of storm water runoff and Truckee Meadows Structural Controls Design and Low Impact Development Manual.

[2] Clear zones are to be in compliance with AASHTO Roadside Design Guidelines. Average Daily Traffic (ADT) and design speed will determine clear zone widths. Landscaping within the clear zones shall be traversable and in compliance with AASHTO Roadside Design Guidelines. Spray irrigation is not allowed within six feet of the edge of pavement.

## Neat Streets

Neat streets provide focus on multimodal connections within the neighborhoods to access the trails and open spaces within the community. This street type will provide a ten-foot-wide travel lane, with parking on one side to control traffic speeds and maintain a safe pedestrian and bike environment. Homes may front the neat street to create a sense of community, safe for walking and meeting neighbors. Traffic calming techniques such as landscape bump-outs at intersections and midpoints along the streetscape and raised or high visibility crosswalks to control speeds and maintain pedestrian safety in neighborhoods will be incorporated into the street design and reviewed and approved at the time of tentative map.

## Neat Street Design Standards

**The builder shall be responsible for the construction of the neat streets and associated intersections, landscaping, and drainageway improvements, per Figures 39, 45, 46 and 47 and the following standards.**

- 1) Neat streets shall be constructed without curb and gutter to promote water runoff into drainage channels.
  - a) A geotechnical engineer shall provide recommendations for treatment of shoulders of roadways, which shall avoid drainage from roadways infiltrating into base or subgrade of roadway sections.
- 2) The landscape areas along the roadway shall be subject to the following standards.
  - a) Landscape shall include clustered street trees planted at a rate of one tree for every 300 square feet of required landscape area.
  - b) 70 percent of the required trees shall be large trees and 30 percent may be small trees, defined as follows:
    - i. Large deciduous trees shall have a minimum caliper of two and one-half inches, and large evergreen trees shall have a minimum height of ten feet.
    - ii. Small deciduous trees shall have a minimum caliper of one inch and small evergreen trees shall have a minimum height of six feet.
  - c) Landscape shall include ornamental native shrubs and groundcover.
    - i. A minimum of six shrubs shall be planted for every required tree.
      1. At least 25 percent of the required shrubs shall be a minimum five-gallon in size with the remaining 75 percent one-gallon or larger.
    - ii. Ground covers must be a minimum of four-inch pot container size.
    - iii. Vines must be a minimum of a five-gallon container in size.
  - d) Use of turf shall not exceed ten percent of the required landscape area.
    - i. Solid sod or grass seed applied with Hydro-Mulch may be used.
    - ii. Turf areas shall not be permitted directly adjacent to roadway sections.
  - e) All utilities shall be screened with landscape from the view of the roadway.
- 3) Design of the roadways shall be in accordance with the City of Reno Public Works Design Manual with the above exceptions.
- 4) For subdivisions utilizing knuckles, cul-de-sacs, or other similar design features, an additional 32-foot-wide landscape strip or parking bump-out area, maintained by the HOA, shall be provided in association with these features (Figures 45 and 46). The intent is to break up linear street appearances. Final design of these features shall be reviewed and approved with the associated tentative map or special use permit, as applicable.



- 5) An Operations and Maintenance ("O&M") Manual of all drainage improvements shall be prepared and approved by the City prior to approval of a Merchant Builder's Final Map.
- 6) The City of Reno shall own and maintain all storm drain infrastructure ~~including infrastructure that may fall outside t~~within the public ROW.
  - a) ~~The Merchant Builder will provide permanent storm drain easements dedicated to the City where public storm drain infrastructure is located outside of ROW.~~
- 7) The Merchant Builder or Drainage Association ~~Homeowner's Association~~ shall own and maintain all drainage improvements in the landscape corridors, up to the grate of public catch basins.
  - a) Landscape drains, such as underdrains, shall be owned and maintained by the Merchant Builder or Drainage Association ~~Home Owner's Association~~.



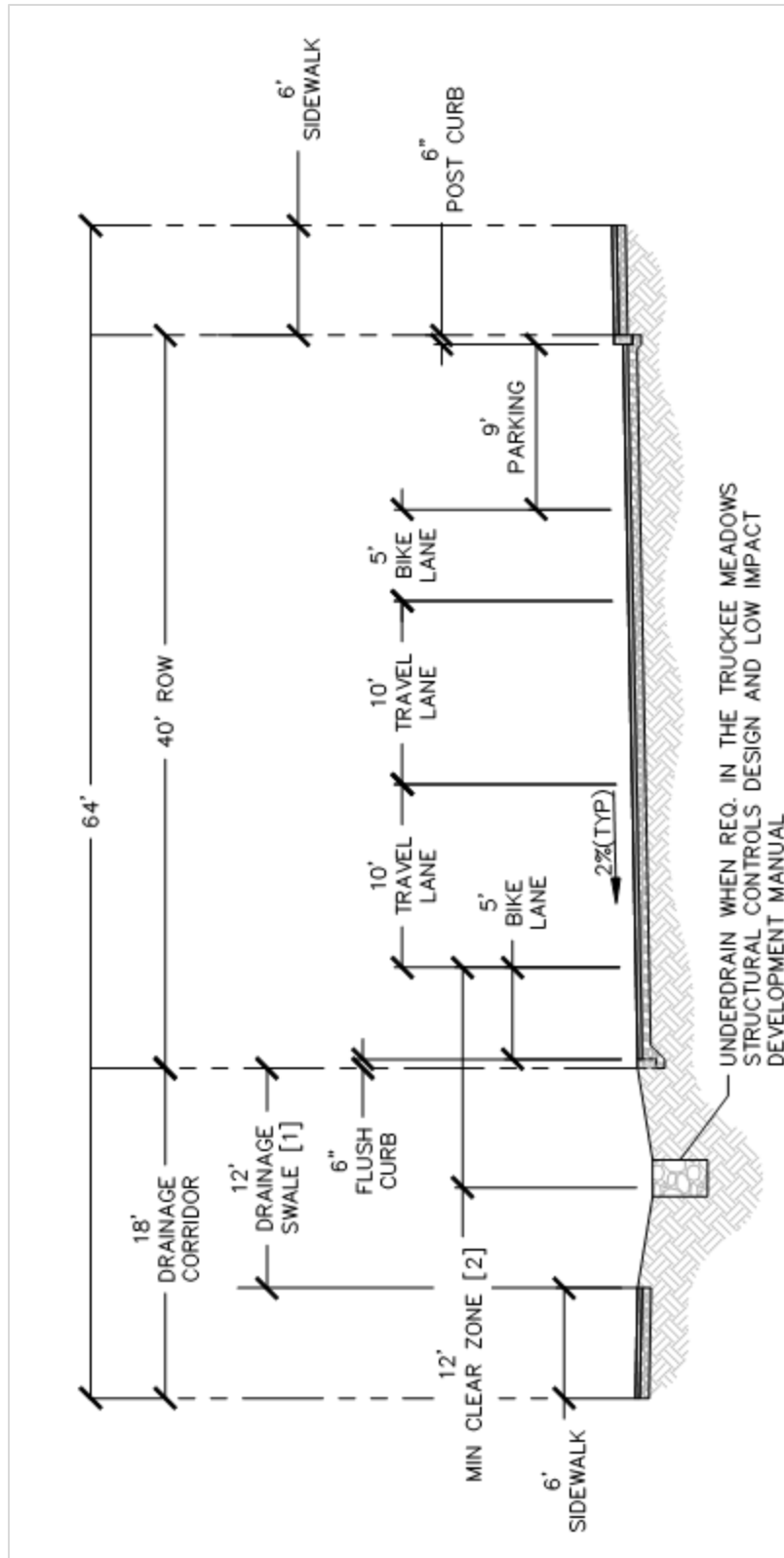
**Figure 45: Typical Parking Bump-Out along Neat Street**

**32' wide**



**Figure 46: Typical Landscape Island along Neat Street**

**32' wide**



**Figure 47: Typical Neat Street Rendering**

[1] Drainage swales/channels will be designed in accordance with Truckee Meadows Regional Drainage Manual Standards for conveyance of storm water runoff and Truckee Meadows Structural Controls Design and Low Impact Development Manual.

[2] Clear zones are to be in compliance with AASHTO Roadside Design Guidelines. Average Daily Traffic (ADT) and design speed will determine clear zone widths. Landscaping within the clear zones shall be traversable and in compliance with AASHTO Roadside Design Guidelines. Spray irrigation is not allowed within six feet of the edge of pavement.

## Local Street

Local streets are the predominant-type street within the neighborhoods. These streets include on-street parking on one side of the street, attached sidewalk on the uphill side, and a drainage corridor along the downhill side of the street. All local streets shall use traffic calming techniques such as, but not limited to: landscape bump-outs at intersections and midpoints along the streets, raised or high visibility crosswalks to control speeds and maintain pedestrian safety in neighborhoods.

To prevent vehicular headlights from entering directly onto the fronts of homes at street intersection entrances and at ends of streets, additional landscape buffering should be used by providing a minimum of three-foot-tall landscape hedge or berm, which may be located within a landscape island. Final design of these features shall be reviewed and approved with the associated tentative map or special use permit, as applicable.



**Figure 48: Example of Landscaping Being Used to Block Headlights at Street Intersection Graphic**

## Local Street Design Standards

**The Master Developer or merchant builder, as applicable, shall be responsible for the construction of the local streets, associated intersections, landscaping, and drainage improvements, per Figures 39, 49 and 50, and the following standards.**

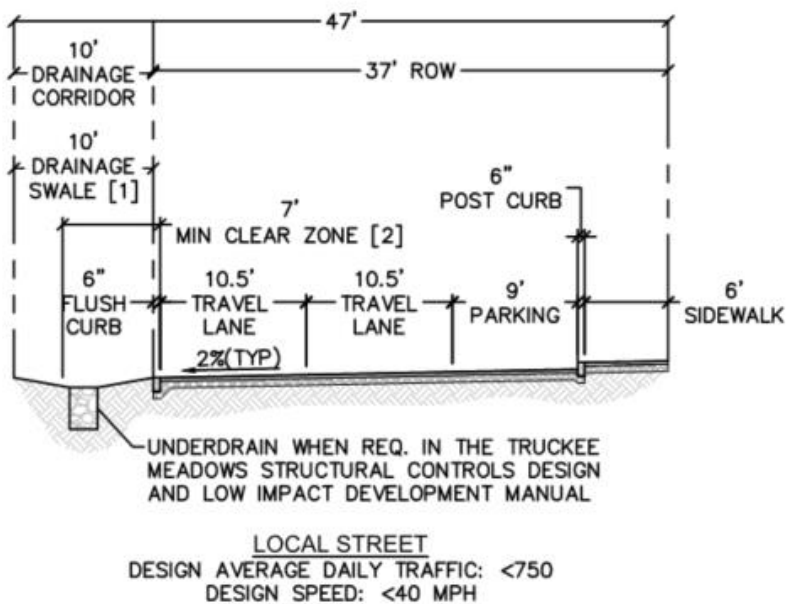
- 1) The landscape areas along the roadway shall be subject to the following standards.
  - a) Landscape shall include clustered street trees planted at a rate of one tree for every 300 square feet of required landscape area.
  - b) 70 percent of the required trees shall be large trees and 30 percent may be small trees, defined as follows:
    - i. Large deciduous trees shall have a minimum caliper of two and one-half inches, and large evergreen trees shall have a minimum height of ten feet.
    - ii. Small deciduous trees shall have a minimum caliper of one inch and small evergreen trees shall have a minimum height of six feet.
  - c) Landscape shall include ornamental native shrubs and groundcover.
    - i. A minimum of six shrubs shall be planted for every required tree.

1. At least 25 percent of the required shrubs shall be a minimum five-gallon in size with the remaining 75 percent one-gallon or larger.
  - ii. Ground covers must be a minimum of four-inch pot container size.
  - iii. Vines must be a minimum of a five-gallon container in size.
- d) Use of turf shall not exceed ten percent of the required landscape area.
  - i. Turf areas shall not be allowed directly adjacent to roadway sections.
  - ii. Solid sod or grass seed applied with Hydro-Mulch may be used.
- e) All utilities shall be screened with landscape from the view of the roadway.
- 2) Design of local streets shall be in accordance with the City of Reno Public Works Design Manual with the above exceptions.
- 3) When a local street connects to a collector or arterial roadway, the local street shall include a 20-foot-wide landscaped island extending at least 50 feet from the entrance of intersection (Figure 49). Final design of these features shall be reviewed and approved with the associated tentative map or special use permit, as applicable.
- 4) An Operations and Maintenance ("O&M") Manual of all drainage improvements shall be prepared and approved by the City prior to approval of a Merchant Builder's Final Map.
- 5) The City of Reno shall own and maintain all storm drain infrastructure ~~including infrastructure that may fall outside~~ within the public ROW.
  - a) ~~The Merchant Builder will provide permanent storm drain easements dedicated to the City where public storm drain infrastructure is located outside of ROW.~~
- 6) The Merchant Builder or Drainage Association ~~Homeowner's Association~~ shall own and maintain all drainage improvements in the landscape corridors, up to the grate of public catch basins.
  - a) Landscape drains, such as underdrains, shall be owned and maintained by the Merchant Builder or Drainage Association ~~Home Owner's Association~~.



**Figure 49: Typical Landscape Island along Local Street Intersection**





[1] Drainage swales/channels will be designed in accordance with Truckee Meadows Regional Drainage Manual Standards for conveyance of storm water runoff and Truckee Meadows Structural Controls Design and Low Impact Development Manual.

[2] Clear zones are to be in compliance with AASHTO Roadside Design Guidelines. Average Daily Traffic (ADT) and design speed will determine clear zone widths. Landscaping within the clear zones shall be traversable and in compliance with AASHTO Roadside Design Guidelines. Spray irrigation is not allowed within six feet of the edge of pavement.

**Figure 50: Typical Local Street Rendering**



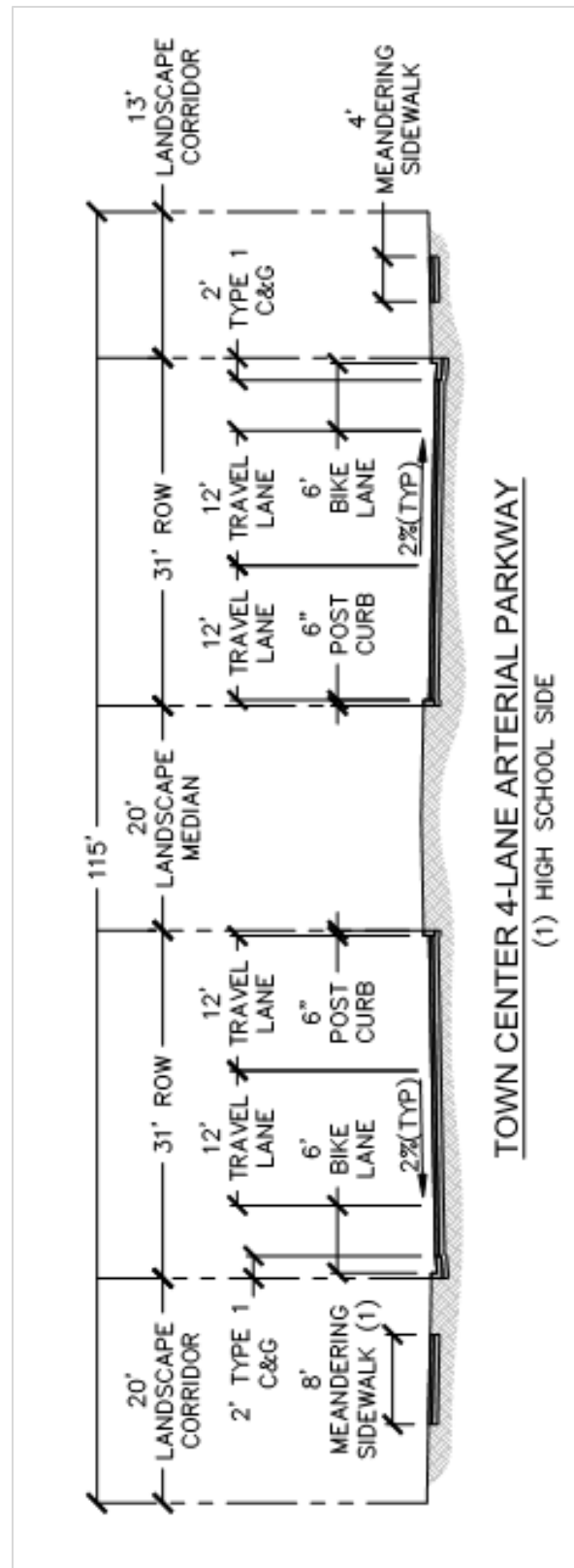
### **Town Center Four Lane Arterial Parkway**

The Town Center Arterial Parkway will be the main roadway within the StoneGate Town Center development. The roadway shall be four lanes wide, separated by a twenty-foot landscape median. Two roundabouts shall control traffic and provide access to the Industrial Parkway and two lane Arterial Parkway. The Town Center Arterial Parkway shall include an eight-foot meandering sidewalk adjacent to the high school and four-foot-wide meandering sidewalk adjacent to the retail side. The parkway shall contain a six-foot-wide bike lane on both sides to encourage bike commuting and on-street cycling.

### **Town Center Four Lane Arterial Parkway – Design Standards**

**The Master Developer shall be responsible for the construction of the Town Center four lane Arterial Parkway, associated roundabouts and the right of way improvements per Figures 39 and 51, and the following standards:**

- 1) This street shall be constructed with curb and gutter, parkway strips, and sidewalks on both sides of the street.
- 2) An eight-foot-wide sidewalk shall be provided on the high school side of the street with a four-foot wide sidewalk on the opposite side of the street.
- 3) On-street parking shall not be permitted on the four lane Arterial Parkway.
- 4) Direct driveway access to residences shall not be permitted on the four lane arterial Parkway.
- 5) Intersections along the four lane Arterial Parkway shall include landscaped gateways and signage to neighborhoods, subject to the gateway and sign standards in this PUD.
- 6) The landscape areas along the roadway and within the median shall be subject to the following standards.
  - a) Landscape shall include clustered street trees planted at a rate of one tree for every 300 square feet of required landscape area.
  - b) 70 percent of the required trees shall be large trees and 30 percent may be small trees, defined as follows:
    - i. Large deciduous trees shall have a minimum caliper of two and one-half inches, and large evergreen trees shall have a minimum height of ten feet.
    - ii. Small deciduous trees shall have a minimum caliper of one inch and small evergreen trees shall have a minimum height of six feet.
  - c) Landscape shall include ornamental native shrubs and groundcover.
    - i. A minimum of six shrubs shall be planted for every required tree.
      1. At least 25 percent of the required shrubs shall be a minimum of five-gallon with the remaining 75 percent one gallon or larger.
    - ii. Ground covers must be a minimum of four-inch pot container size.
    - iii. Vines must be a minimum of a five-gallon container in size.
  - d) Use of turf shall not exceed ten percent of required landscape area.
    - i. Turf areas shall not be permitted directly adjacent to roadway sections.
    - ii. Solid sod or grass seed applied with Hydro-Mulch may be used.
  - e) All utilities shall be screened with landscape from view of the roadway.
2. Design of the arterials shall be in accordance with the City of Reno Public Works Design Manual with the above exceptions.



**Figure 51: Typical Town Center 4-Lane Arterial Parkway**

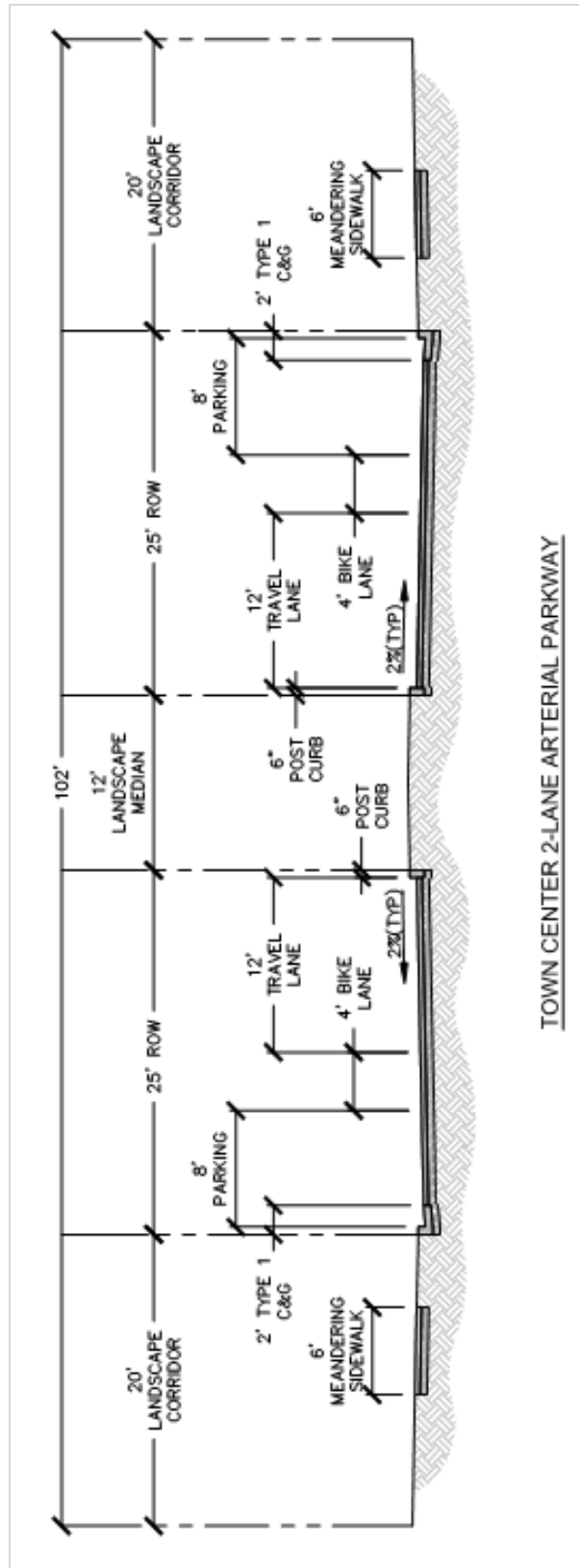
### **Town Center Two Lane Arterial Parkway**

The Town Center two lane Arterial Parkway shall be the primary access road into the residential development within the Town Center. The roadway shall be two lanes wide, separated by a twelve-foot landscape median, with bike lanes, parking and sidewalks on both sides.

### **Town Center Two Lane Arterial Parkway – Design Standards**

**The Master Developer shall be responsible for the construction of the Town Center two lane Arterial Parkway, associated intersections and the landscape and drainageway corridor improvements, per Figures 39 and 52, and discussed in the following standards.**

- 1) This street shall be constructed with curb and gutter, parkway strips, and sidewalks on both sides of the street.
- 2) On-street parking shall be permitted on both sides of this street.
- 3) Direct driveway access to residences shall not be permitted.
- 4) Intersections along the two lane Arterial Parkway shall include landscaped gateways and signage to neighborhoods, subject to the gateway and sign standards in this PUD.
- 5) The landscape areas along the roadway and within the median shall be subject to the following standards.
  - a) Landscape shall include clustered street trees planted at a rate of one tree for every 300 square feet of required landscape area.
  - b) 70 percent of the required trees shall be large trees and 30 percent may be small trees, defined as follows:
    - i. Large deciduous trees shall have a minimum caliper of two and one-half inches, and large evergreen trees shall have a minimum height of ten feet.
    - ii. Small deciduous trees shall have a minimum caliper of one inch and small evergreen trees shall have a minimum height of six feet.
  - c) Landscape shall include ornamental native shrubs and groundcover.
    - i. A minimum of six shrubs shall be planted for every required tree.
      1. At least 25 percent of the required shrubs shall be a minimum of five-gallon with the remaining 75 percent one gallon or larger.
    - ii. Ground covers must be a minimum of four-inch pot container size.
    - iii. Vines must be a minimum of a five-gallon container in size.
  - d) Use of turf shall not exceed ten percent of required landscape area.
    - i. Turf areas shall not be permitted directly adjacent to roadway sections.
    - ii. Solid sod or grass seed applied with Hydro-Mulch may be used.
  - e) All utilities shall be screened with landscape from view of the roadway.
- 6) Design of the arterials shall be in accordance with the City of Reno Public Works Design Manual with the above exceptions.



**Figure 52: Typical Town Center 2-Lane Arterial Parkway**

## **Industrial Parkway**

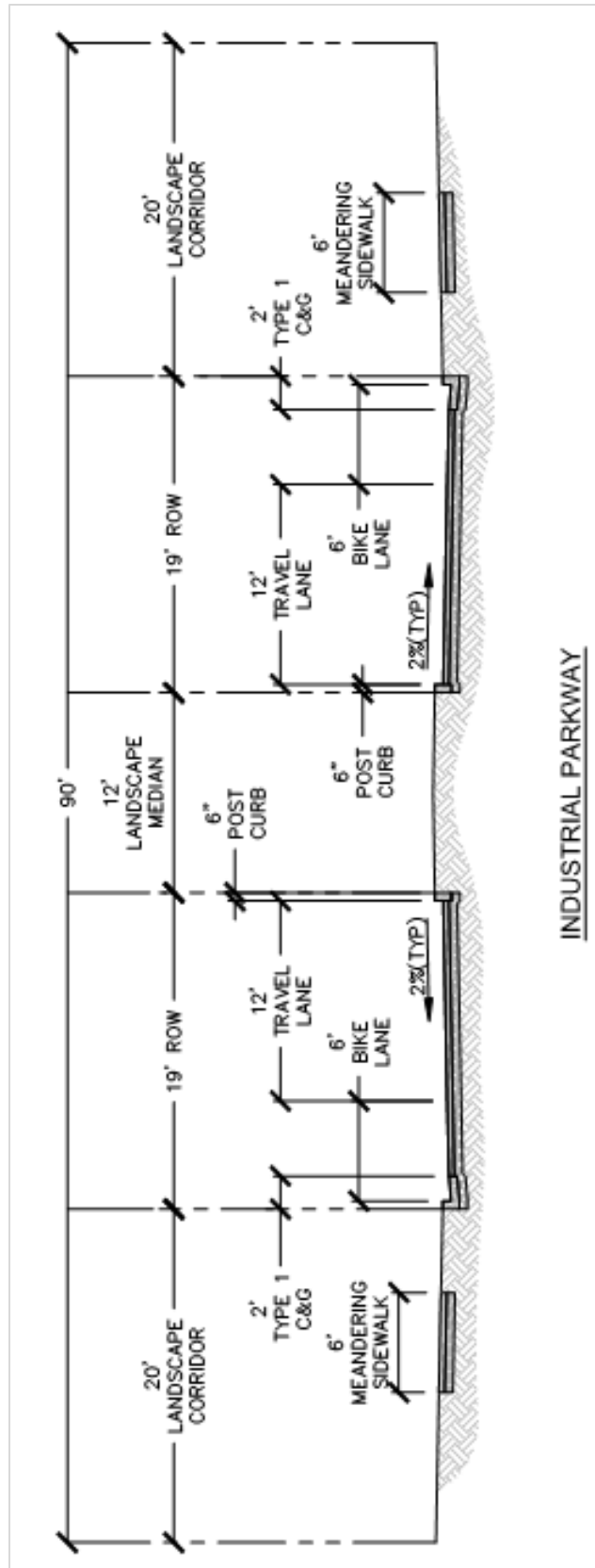
The Industrial Parkway shall be the primary access roadway for the industrial development within Town Center. The roadway shall be two lanes wide, separated by a twelve-foot-wide median, with six-foot-wide bike lanes and six-foot-wide sidewalks on both sides.

## **Industrial Parkway Design Standards**

**The Master Developer shall be responsible for the construction of the Industrial Parkway, associated intersections and the landscape and drainageway corridor improvements, per Figures 39 and 53, and as described in the following standards.**

- 1) This street shall be constructed with curb and gutter, parkway strips, and sidewalks on both sides of the street.
- 2) On-street parking shall not be permitted.
- 3) The landscape corridors located along the roadway shall be subject to the following standards.
  - a) Landscape shall include clustered street trees planted at a rate of one tree for every 300 square feet of required landscape area.
  - b) 70 percent of the required trees shall be large trees and 30 percent may be small trees, defined as follows:
    - i. Large deciduous trees shall have a minimum caliper of two and one-half inches, and large evergreen trees shall have a minimum height of ten feet.
    - ii. Small deciduous trees shall have a minimum caliper of one inch and small evergreen trees shall have a minimum height of six feet.
  - c) Landscape shall include ornamental native shrubs and groundcover.
    - i. A minimum of six shrubs shall be planted for every required tree.
      1. At least 25 percent of the required shrubs shall be a minimum of five-gallon with the remaining 75 percent one gallon or larger.
    - ii. Ground covers must be a minimum of four-inch pot container size.
    - iii. Vines must be a minimum of a five-gallon container in size.
  - d) Use of turf shall not exceed ten percent of the required landscape area.
    - i. Turf areas shall not be permitted directly adjacent to roadway sections.
    - ii. Solid sod or grass seed applied with Hydro-Mulch may be used.
- 4) All utilities shall be screened with landscape from the view of the roadway.
- 5) Design of the industrial parkway shall be in accordance with the City of Reno Public Works Design Manual with the above exceptions.





**Figure 53: Typical Industrial Parkway**

## **SF. Green Bike Lane**

StoneGate PUD encourages safe street bicycle use and incorporates Green Bike Lane standards for roadway improvements. The purpose is to define a space along the roadway that clearly delineates bicycle movements and limits locations for potential conflict with vehicles. The configuration of safe bicycle intersections and lanes shall include elements such as color, signage, medians, and pavement markings. Final bike lane design shall be reviewed and approved with each respective special use permit or final map, as applicable.

### **Green Bike Lane Design Standards**

StoneGate roadways shall incorporate the following Green Bike Lane Standards:

**Arterial Parkway 4-Lane, 2-Lane and Collector roadways shall include the following bike lane standards:**

- 1) six-foot-wide green colored bike lanes on both sides of street
- 2) Bike boxes at signalized intersections
- 3) 12-foot-wide green safety box intersections measuring at least six feet long, when located at signalized intersections
- 4) Safe passage markings through roundabouts
- 5) Pavement markings & signage



*Figure 54: Example of Green Bike Box at Signalized Intersection*

**Neat Streets shall include the following bike lane standards:**

- 1) Five-foot-wide bike lanes on both sides of street
- 2) Bike boxes at signalized intersections
- 3) 12-foot-wide green safety box at intersections measuring at least six feet long, when located at signalized intersections
- 4) Safe passage markings through intersections
- 5) Pavement markings & signage



*Figure 55: Neat Street Bike Lane*

**Local Streets shall include the following bike lane standards:**

- 1) "Share the street" signage

## **ts. Roundabout Design Standards**

Roundabouts shall be located on the arterial and collector roadways. Traffic signals are not permitted unless a roundabout is proven infeasible by a Nevada-licensed traffic engineering study thoroughly demonstrating why a roundabout cannot be constructed.

**The Master Developer shall be responsible for constructing the roundabouts, landscaping, and signature elements per Figure 56 and 57 and the following standards:**

All roundabout intersections shall be designed and constructed as “modern roundabouts” in accordance with the best practices outlined in Roundabouts: An Informational Guide (NCHRP Report 672), Second Edition unless superseded by a newer edition and accepted by Administration. To ensure top quality functionality and traffic operations, the designs shall be prepared by a traffic engineer.

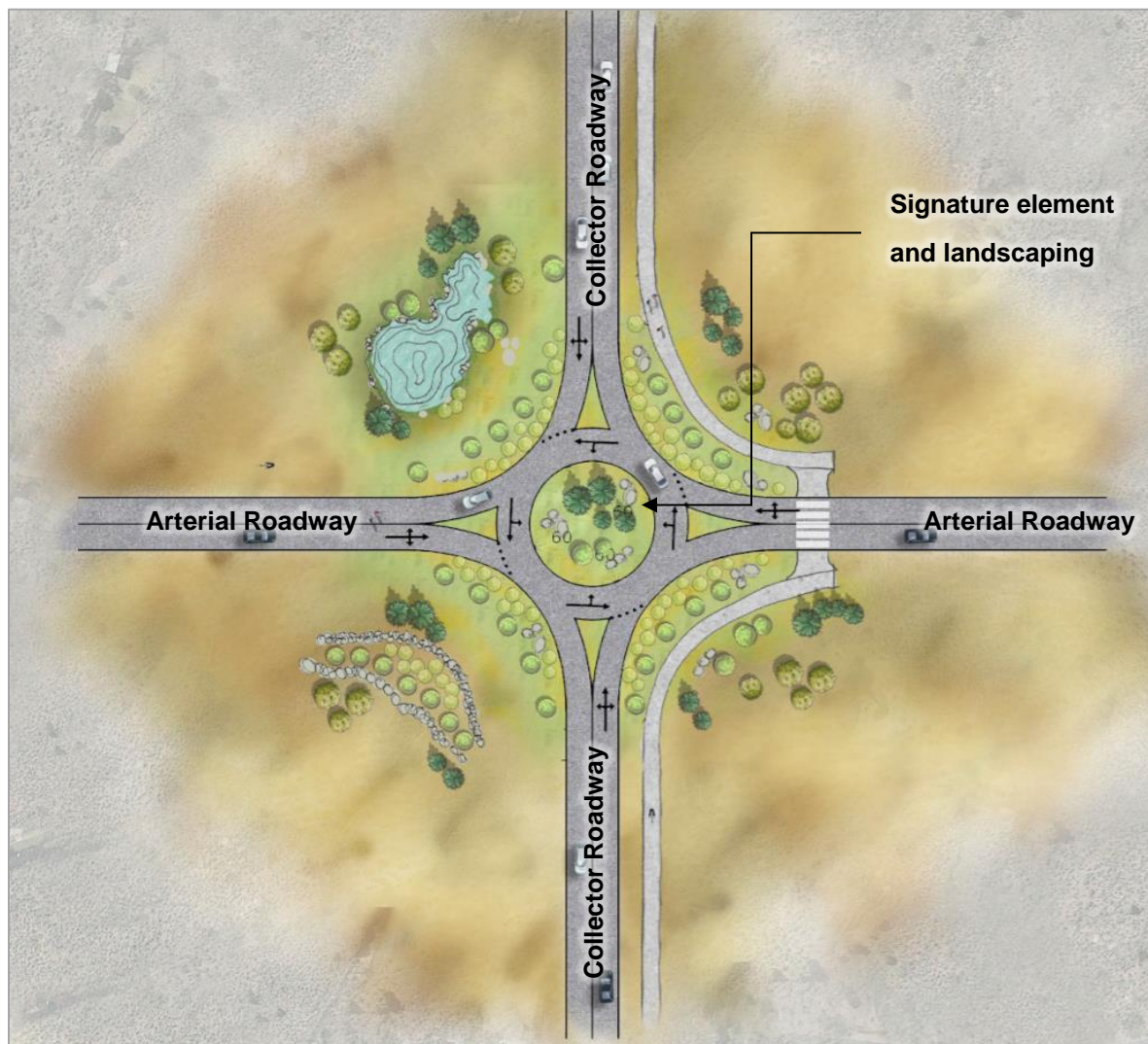
Lane configurations, including bypass lanes, shall be per the StoneGate Traffic Impact Study except as modified by an updated traffic analysis at the time of tentative map, special use permit, building permit or grading permit, as applicable. All roundabouts shall conform to the following standards:

- 1) Roundabout intersections shall be designed in accordance with Roundabouts: An Informational Guide (NCHRP Report 672), Second Edition or newer.
- 2) Landscaping, signage and other vertical features in the roundabout vicinity shall not block intersection sight lines.
  - a) A line of sight analysis shall be provided with the site improvement permit submittal to the City verifying the line of site is clear.
- 3) To create visual interest and differentiate roundabouts, unique features and landscaping are required within roundabout central islands.
- 4) A minimum of one signature element shall be placed within each roundabout.
  - a) A signature element could be a historic artifact from Heinz Ranch or a piece of artwork.



***Figure 56: Example of Heinz Ranch Historic Element***

- 5) Each roundabout shall be planted with a minimum of one tree for every 300 square feet of landscape area defined as follows:
- a) Landscape shall include clustered street trees planted at a rate of one small tree for every 300 square feet of required landscape area.
    - i. Small deciduous trees shall have a minimum caliper of one inch and small evergreen trees shall have a minimum height of six feet.
  - b) Each roundabout shall be planted with a minimum of six shrubs per every required tree.
    - i. At least 25 percent of the required shrubs shall be a minimum five-gallon in size with the remaining 75 percent one-gallon or larger.
    - ii. Ground covers must be a minimum of four-inch pot container size.
    - iii. Vines must be a minimum of a five-gallon container in size.
  - c) Use of turf shall not exceed ten percent of the required landscape area.
    - i. Turf areas shall not be permitted directly adjacent to roadway sections.
    - ii. Solid sod or grass seed applied with Hydro-Mulch may be used.



**Figure 57: Typical Roundabout**



### **ut. Berming along U.S. 395**

The existing NDOT drainage structures are inadequate to pass the 100-year storm event under U.S. 395. The NDOT frontage road unintentionally dam's water and forces overflow onto adjacent properties. Removal of the frontage road and the introduction of landscape berms and buffering along U.S. 395 will alleviate flooding concerns. Prior to construction, the Master Developer shall be required to submit plans for review and approval by NDOT and FHWA, as applicable.

### **Berming along U.S. 395 Design Standards**

**These improvements shall be reviewed with the adjacent tentative map and/or special use permit, as applicable, and constructed over Phase 1 and 2, as shown on the Conceptual Development Phasing Map.**

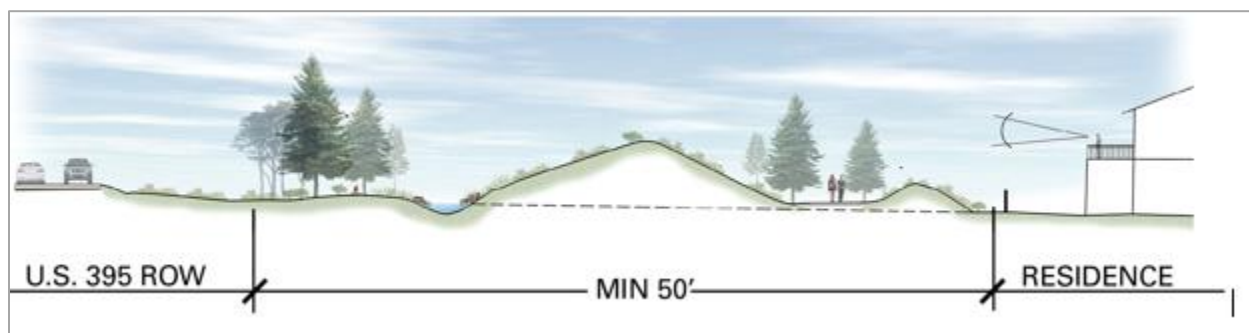
The landscape buffer shall include drainageway improvements to collect and move water to a location where it will be managed. Design shall be reviewed at the tentative map, special use permit, or site improvement permit, as applicable, and will conform to the following standards:

- 1) The landscape buffer can vary in width, but shall be a minimum of 50 feet wide.
- 2) Landscape screening shall buffer adjacent to the rear yards of lots located along U.S. 395 and shall include berming up to ten feet high, evergreen trees, and native landscape.
- 3) The landscape areas along the frontage roadway shall be subject to the following standards.
  - a) Landscape shall include clustered street trees planted at a rate of one tree for every 30 lineal feet of street frontage.
  - b) 70 percent of the required trees shall be large trees and 30 percent may be small trees, defined as follows:
    - i. Large deciduous trees shall have a minimum caliper of two and one-half inches, and large evergreen trees shall have a minimum height of ten feet.
    - ii. Small deciduous trees shall have a minimum caliper of one inch and small evergreen trees shall have a minimum height of six feet.
  - c) Landscape shall include ornamental native shrubs and groundcover.
    - i. A minimum of six shrubs shall be planted for every required tree.
      1. At least 25 percent of the required shrubs shall be a minimum five-gallon in size with the remaining 75 percent one-gallon or larger.
    - ii. Ground covers must be a minimum four-inch pot container size.
    - iii. Vines must be a minimum of a five-gallon container in size.
  - d) Use of turf shall not exceed ten percent of the required landscape area.
    - i. Turf areas shall not be permitted directly adjacent to roadway sections.
    - ii. Solid sod or grass seed applied with Hydro-Mulch may be used in lieu of ground cover.
- 4) A minimum 12-foot-wide paved maintenance road and trail shall provide connectivity to neighborhood and community trail networks.
- 5) Small gathering spaces shall be located along the trail corridor. Specific elements are included in the trail design standards of this PUD.





**Figure 58: Typical U.S. 395 Landscape Buffer Rendering**



**Figure 59: Typical U.S. 395 Landscape Buffer Section**

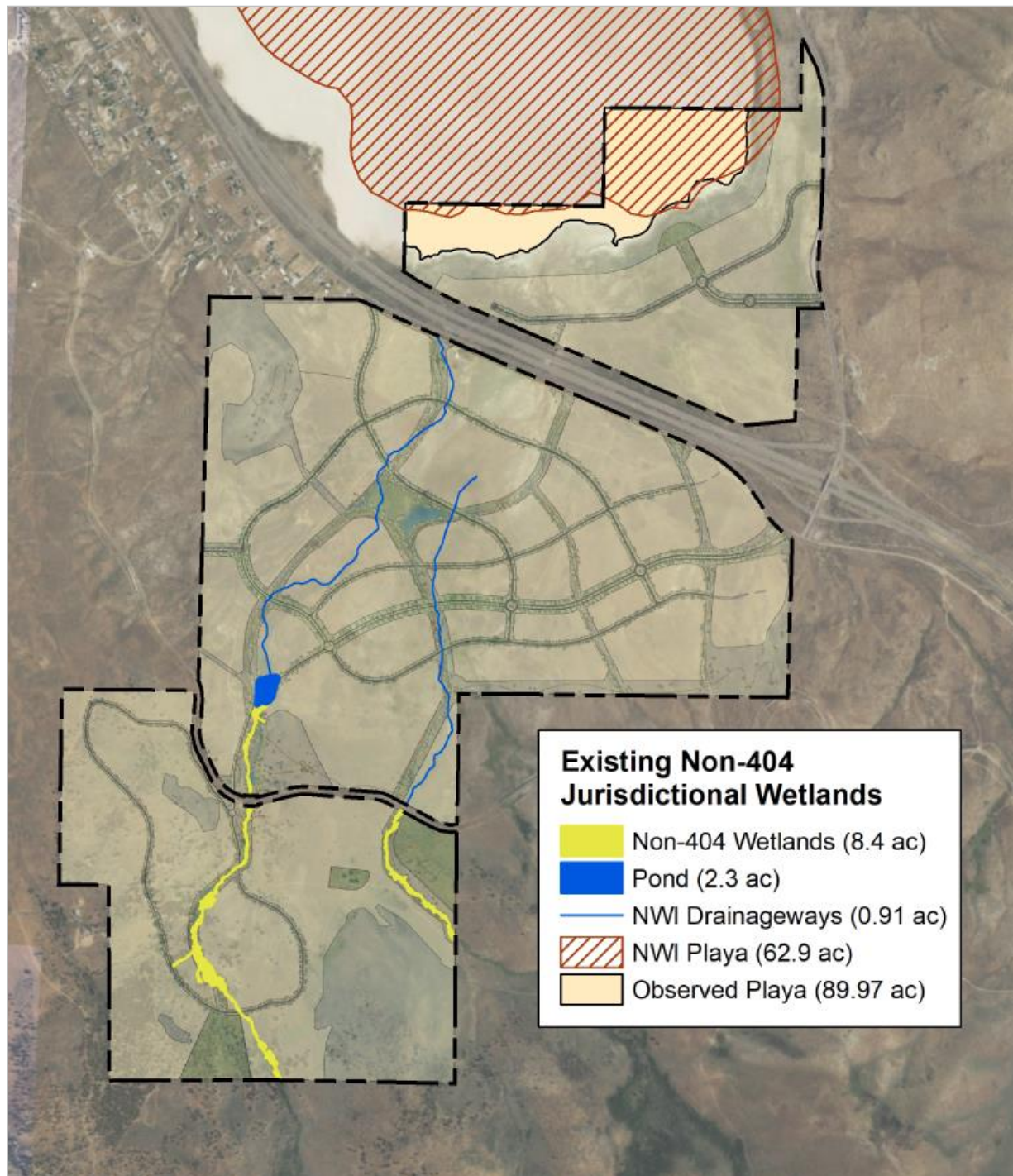
#### **vi. LID Design Standards**

StoneGate shall emphasize and be consistent with ~~the~~ LID standards, including the Truckee Meadows Structural Controls Design and Low Impact Development Manual. —The purpose of the design standards is to provide guidance for the planning, design, and implementation of the LID practices and tailoring design and recommendations that are unique to StoneGate. Conformance with the described LID standards shall be reviewed during the special use permit or tentative map application process, as applicable. The elements described below provide the overall framework for LID standards that shall be incorporated throughout the StoneGate design.

- 1) Cluster development – smaller lot sizes, minimum and varied setbacks, reduced road widths, alternative sidewalk designs, development envelopes for larger lot areas. Conserve wooded areas, steeper slopes, riparian areas, and springs.
- 2) Install measures for on-lot stormwater infiltration and detention through front yard swales and water transport to drainage areas on the perimeter lot areas. Disconnecting and reducing impervious surfaces may minimize or even eliminate storm drainage systems in some areas.
- 3) Design strategies for LID include:
  - a) On-street parking
  - b) Cul-de-sacs with landscaped center islands/bio-retention (landscaped areas are only permitted on private streets that are owned and maintained by an HOA)
  - c) Reduction of roadway length
  - d) Narrowing of lot frontages
  - e) Lengthening street blocks
  - f) Concave medians with curb inlets
  - g) Traffic calming devices
- 4) Design shall include:
  - a) Preserving natural drainage patterns
  - b) Limited curbed local streets with proper base/subgrade protection in design
  - c) Substituting surface swales for catch basins
  - d) Dual drainage systems to first capture water into a swale
- 5) Driveways – direct surface flow into a swale through front yards instead of directly to a gutter. This will be dependent on the final hydrology design associated with the final map and may include a slotted drain and pipes below drives that take runoff from both driveways and streets. Driveways could use permeable pavers, concrete strips, or may be shared with a buffer strip for drainage. The house downspouts shall also be connected to vegetated swales.
- 6) Bump-outs from the sidewalk into the streets that define parking bays shall be used for drainage from both streets and walks by depressing the centers and creating a permeable soil structure to promote drainage.
- 7) Common open space parking with alternative porous materials may include cobble and drain rock (i.e. pavers).

## **WV. Wetland and Stream Environment Protection Standards**

The U.S. Army Corps of Engineers made a determination that Heinz Ranch has 75.44 acres of non-404 jurisdictional Waters of the U.S. An inventory determined that the major drainageways, wetland, and stream environments are potentially subject to the City of Reno Wetlands and Stream Environment Protection Standards.



**Figure 60: Existing Non-404 Jurisdictional Wetlands**



StoneGate's spring-fed stream environments, playas, stands of upland riparian vegetation, and non-404 wetlands taken all together function as a watershed for a portion of the north side of Peavine Mountain. The City of Reno adopted RMC Section 18.12.1805, No Net Loss Standard Adopted, as amended, with a standard that there shall be no net loss in terms of both acreage and value. The goal of no net loss is achieved through one or more of the following ways:

- Designation of lands for resource or open space use.
- Avoid direct impacts through preservation methods during design, site grading, and implementation.
- If the impact is unavoidable, then minimize through mitigation by restoration, establishment, or enhancement on-site.
- Provide off-site mitigation.

When these non-404 jurisdictional wetlands are to be altered or relocated, on-site in-kind mitigation resulting in no net loss shall be required. This section establishes mitigation standards for resources subject to review by the City of Reno. Mitigation plans shall comply with RMC Sections 18.12.1901-1907 and 18.12.1801-1808, City of Reno Major Drainageway Protection Standards and Wetlands and Stream Environment Protections Standards, as amended, and shall include detailed plans for restoration, establishment, and/or enhancement of the drainageways and wetlands affected, including all required technical studies, erosion control, and landscaping. The Master Developer shall submit detailed studies and mitigation plans with each special use permit for any development affecting major drainageways and wetlands within this PUD.

### **Spring and Wetland Environments Mitigation Standards**

- 1) Subsurface flows shall be redirected using French drains, Burrito drains, or a system of drain rock, filter fabric, and perforated pipes.
- 2) Surface flows shall be redirected using naturalized channels.
- 3) All flows shall be redirected to Natural or Disturbed drainageways or ponds.
- 4) A revegetation and/or landscaping plan shall meet the Drainageway Protection and Design Standards.
- 5) Raised or elevated walkways may be constructed for pathways across wetlands.
- 6) Diverted waters may be used to create an irrigation source.
- 7) Provide temporary or permanent potable or reclaimed water for reestablishment and irrigation.
- 8) Erosion control shall be required when redirecting flows.
- 9) Educational or recreational opportunities may be created without adversely affecting fragile flora.

### **Drainageway, Floodplain and Stream Environment Mitigation Standards**

- 1) Regrade and reduce velocities using stepped channels, hydraulic jumps, natural stream restoration methods, or in-channel structures.
- 2) Redirect and pass flows through culverts and headwalls (box, metal, PVC, HDPE or concrete gabion, rockery, or other approved materials).
- 3) Redirect and pass flows through permanent diversions, ponds, open channel drainage, slope drains, runoff control ditches, or infiltration gallery.
- 4) Erosion control shall be required when redirecting flows.
- 5) Incorporate low impact design while meeting drainage design standards
- 6) Enhance groundwater recharge using pervious materials.

- 7) Provide temporary or permanent potable or reclaimed water for reestablishment and irrigation.

### **Reservoir Mitigation Standards**

- 1) Relocate on-site reservoir to downstream location to be used for both retention and detention.
- 2) Reestablish open water areas within project corridors using diversion and control structures. Construct diversion structures for storm drainage flows, control, and regulate over-flows.
- 3) Construct trails and recreational opportunities.

### **Off-site Playa**

- 1) Construct drainage cut-off channel, first flush control, or flood control basins
- 2) Increase flood retention basins and include stormwater volume replacement due to development.
- 3) Construct all weather maintenance access.
- 4) Limit revegetation.
- 5) Educational or recreational opportunities may be created without adversely affecting fragile flora.

## **xw. Major Drainageway Design Standards**

The StoneGate site contains four existing major drainage channels that carry flows from south to north through the site and across U.S. 395; terminating in White Lake. Two of these drainageways follow their natural course, coming off Peavine Mountain, while two others are man-made diverted waterways that sheet flow across previously irrigated fields. For the purpose of this PUD, each existing major drainage is shown on Figure 61. The StoneGate PUD will reroute several major drainageways, as shown on Figure 62. The disturbed and rerouted drainageways will be designed by a licensed engineer, such as a geomorphologist, and reviewed and approved at the time of special use permit or tentative map, as applicable.

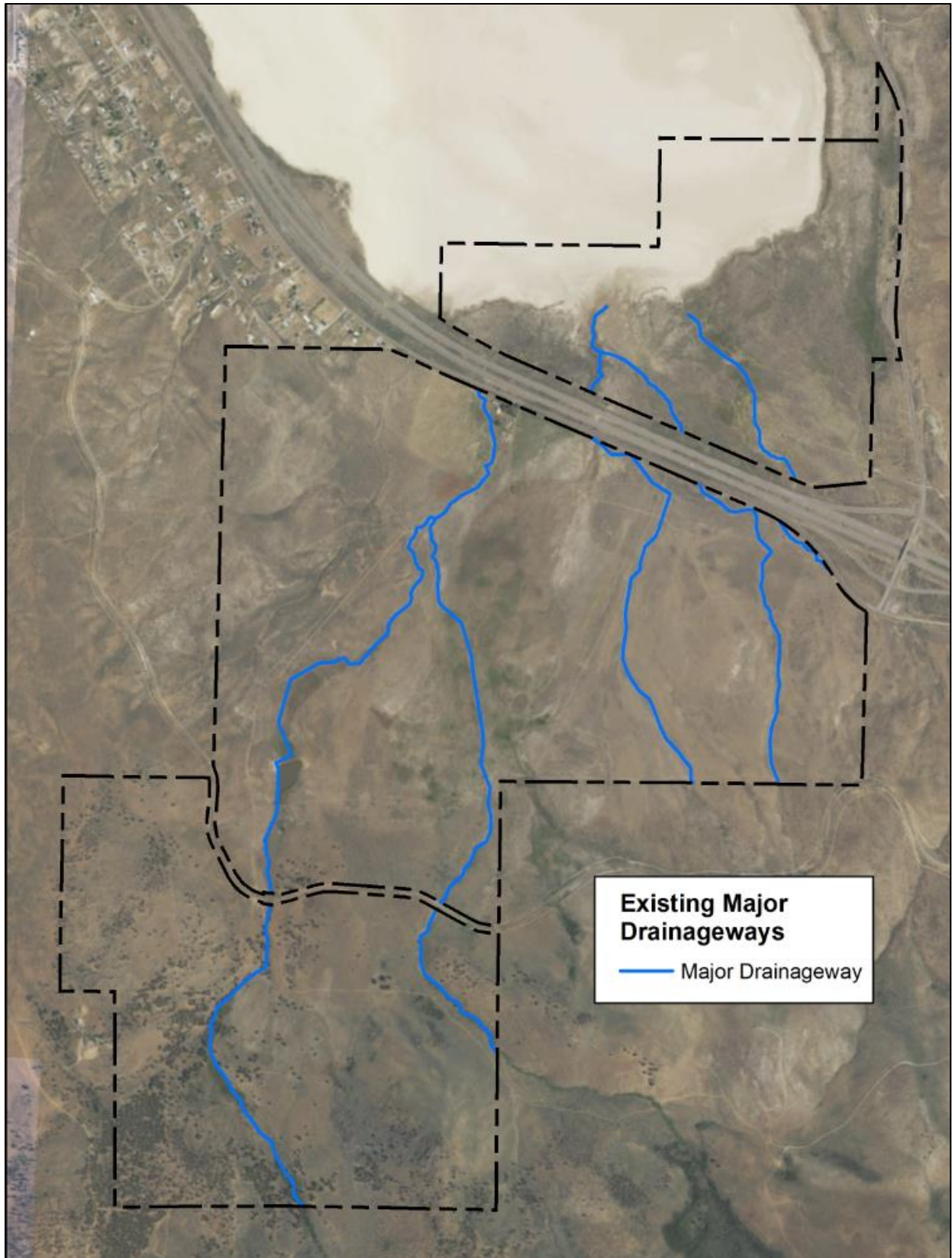
Alteration of any major drainageway will be reviewed through a special use permit with the appropriate studies and RMC Section 18.12.1901-1907, Drainageway Protection Standards, as amended. The studies shall address future land use conditions adjacent to the drainageways and will meet or modify certain criteria within the City of Reno Design Manual and the Truckee Meadows Regional Drainage Manual standards together with appropriate landscaped drainageway and the additional standards in this section. Approvals by outside agencies, including Washoe County (on north parcel), NDOT and FHWA, as applicable, will be reviewed during the special use permit or tentative map, as applicable. The intent is to create natural stream-like channel environment to convey storm and drainage waters through the developed property while providing public safety.

For the purpose of this PUD, there are two major drainageway types: natural and disturbed, which are defined as follows:

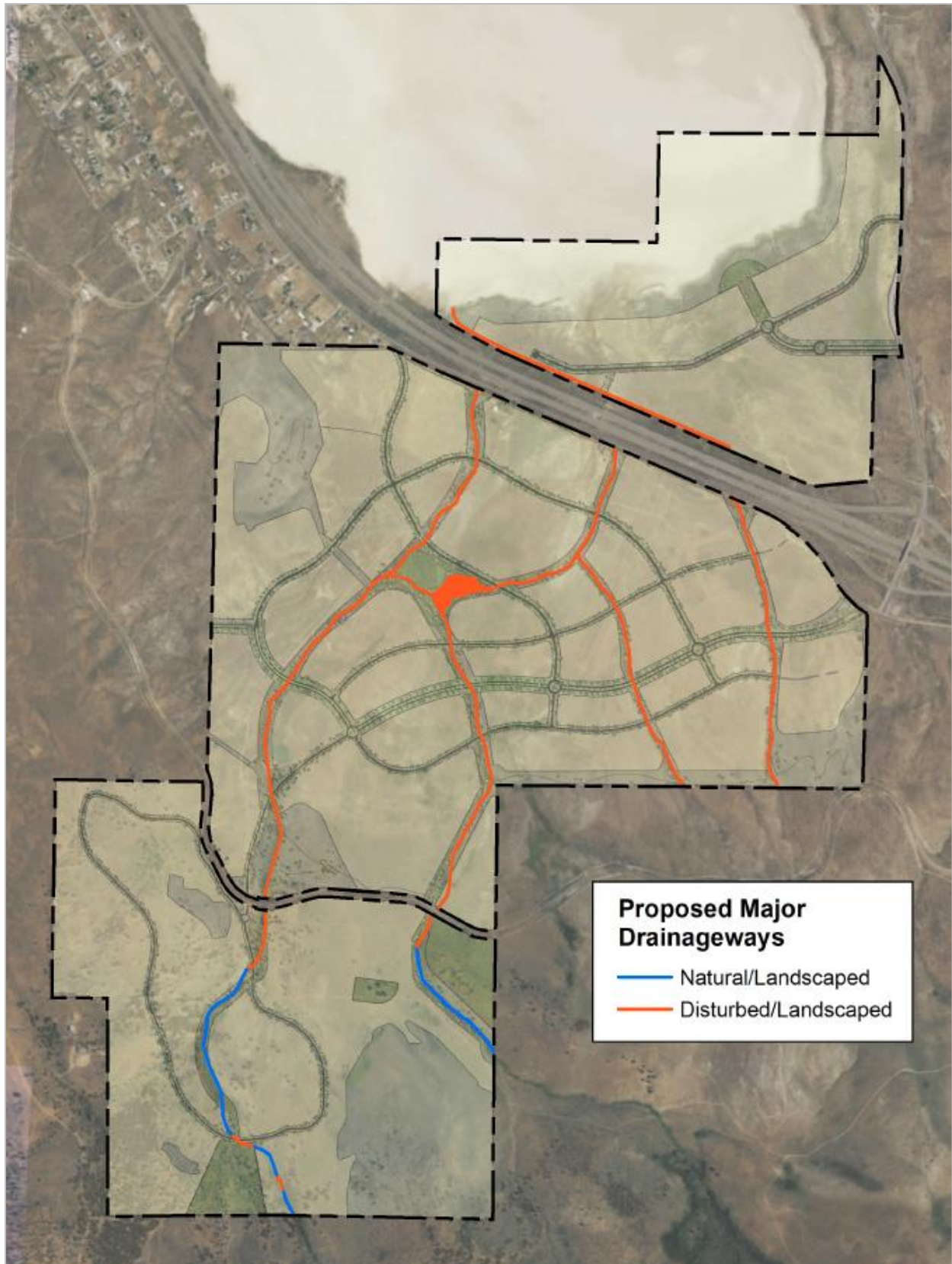
- 1) Natural – Drainageways which have not been or should not be altered by man or which have significant vegetation or which by their nature provide for filtration or impoundment of stormwaters. This includes drainageways which will only be altered by isolated and limited grading to facilitate temporary or permanent roadway, utility or trail crossings, enhancement of water quality, improvements to habitat, facilitate drainage control, or groundwater recharge or public safety.



- 2) Disturbed – Drainageways which have been or will be significantly graded, filled, or otherwise altered by man. This includes mass grading to control drainage throughout the development, facilitate groundwater recharge, provide recreational and park opportunities, and public safety.



**Figure 61: Existing Major Drainageways**

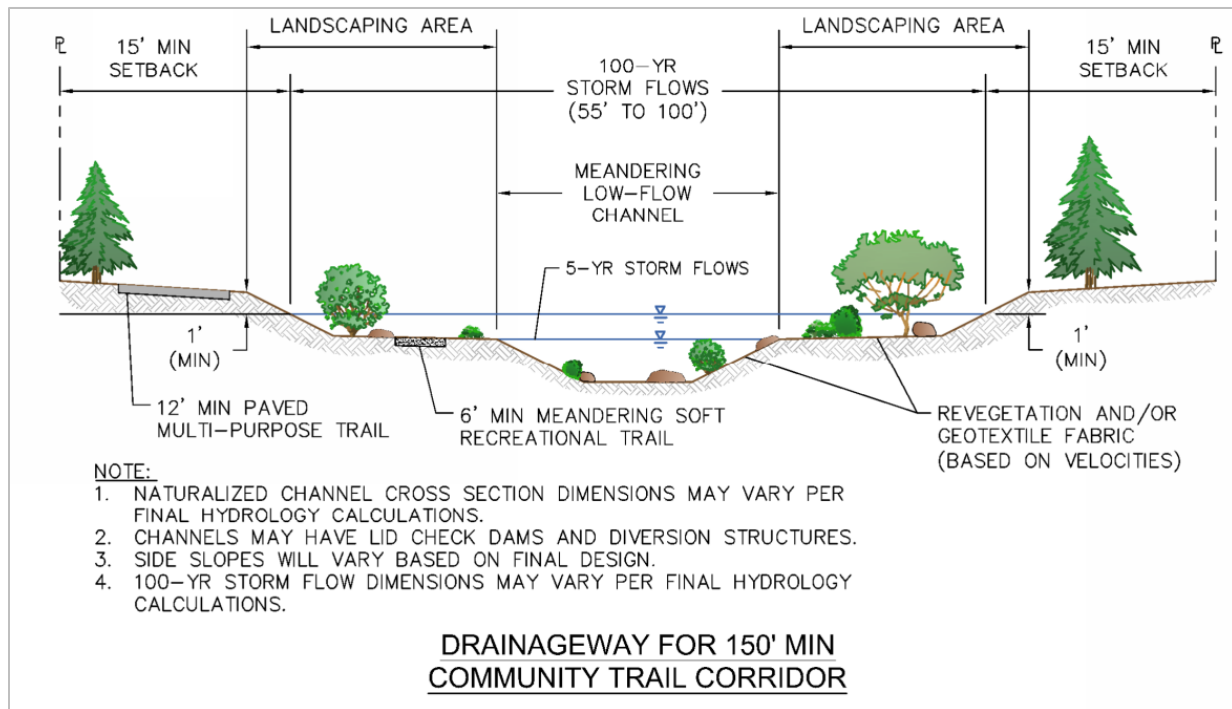


**Figure 62: Proposed Major Drainageways**

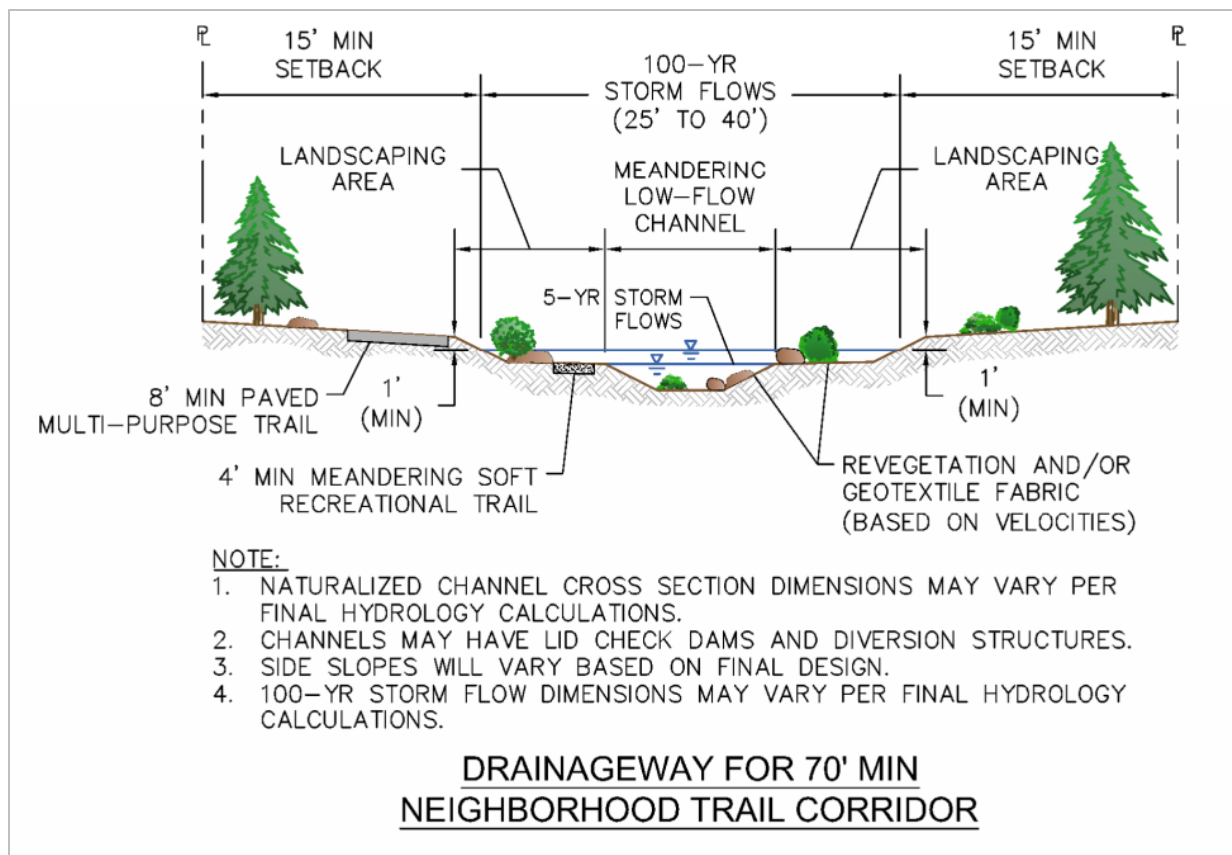


## Drainageway Standards

- 1) An approved FEMA CLOMR shall be required prior to issuance of each of the Master Developer's grading permits.
  - a) An approved FEMA LOMR shall be required prior to the issuance of the first Certificate of Occupancy for any home within a FEMA-designated floodway or floodplain.
- 2) Standards for drainageways with trails and recreation amenities are identified in the Open Space Design Standards, but may be altered when doing so creates an improvement to recreational amenities and shall be reviewed by City staff during the special use permit or tentative map process.
- 3) Landscaping in disturbed drainageways shall use native vegetation, riparian vegetation, turf, or non-native ornamental plant species designed to address aesthetics, whichever is deemed appropriate and is approved by City staff.
- 4) All drainageways shall be maintained by the a—Master Developer or Drainage Association~~Homeowners Association (MHOA)~~, or similar mechanism, and will not be part of individual lots.
- 5) Drainageways along U.S. 395 shall be provided with emergency access granted to NDOT and the City of Reno.
  - a) Access easements shall be approved by the City of Reno and/or NDOT at the time of parcel map, tentative map, and final map, as applicable.
- 6) Crossings of drainageways shall include culvert arches, box culverts, con-span bridges, headwalls, or acceptable alternatives.
- 7) Maintenance access to drainage structures and cleanouts will be asphalt, concrete, cobble, gravel, or other approved all-weather material.
- 8) Whenever development alterations impact the 15-foot setback of any drainageway, those areas shall remain in their natural condition and will be marked and restricted as a non-construction area with no stockpiling of materials, no parking of equipment, and no dumping of refuse, soils, or rocks.
- 9) When development is located adjacent to a drainageway, the applicant shall submit a detailed fencing plan at the time of the Final Map submittal.
- 10) Any grading or landscaping proposed within the 15 feet of the 100-year flow line shall be designed to be consistent in character with the existing condition, or provide additional landscape and recreation improvements.



**Figure 63: Typical Drainageway Cross-Section for 150-foot-wide Corridor**



**Figure 64: Typical Drainageway Cross-Section for 70-foot-wide Corridor**



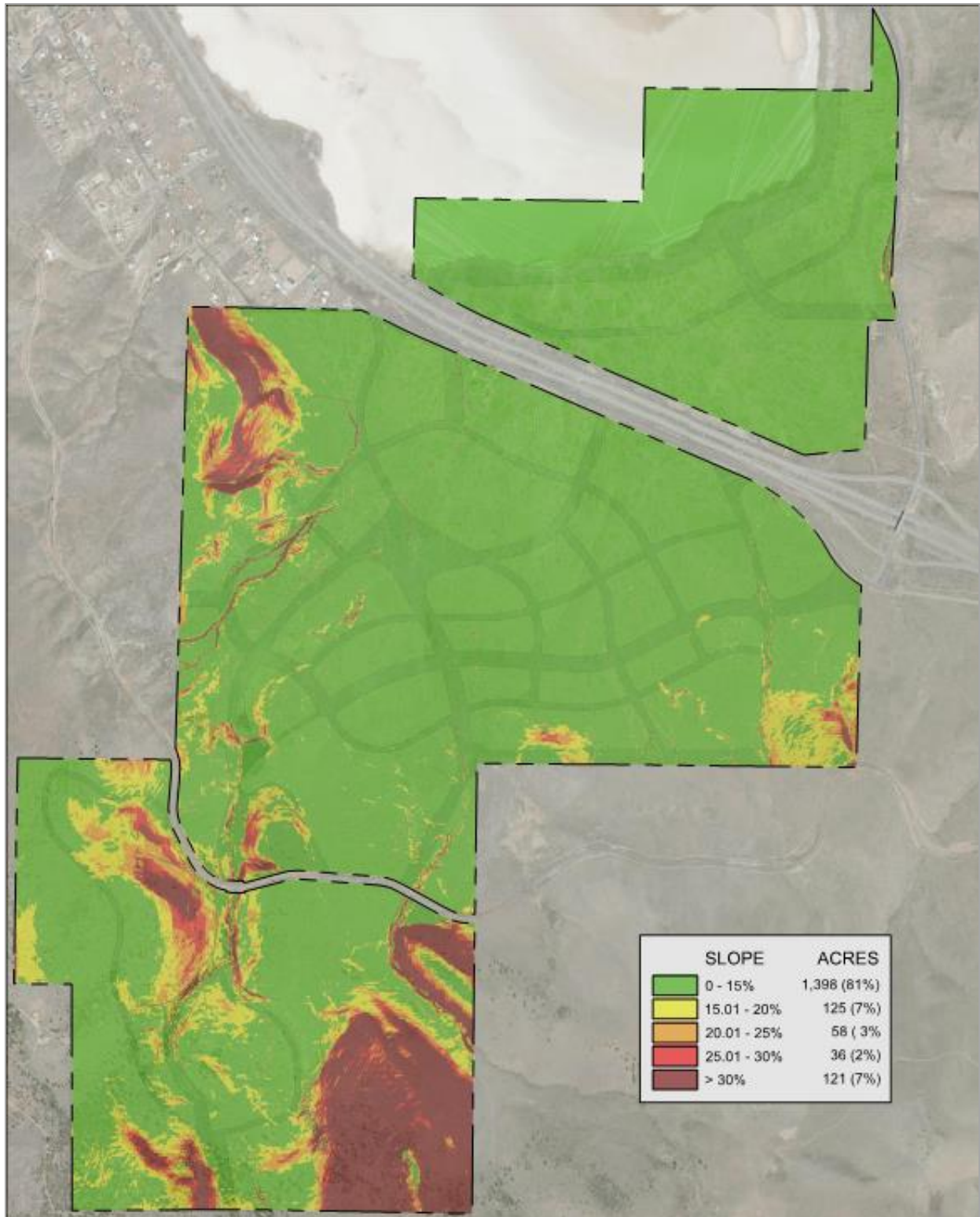
## **yx. Hillside Development**

Figure 65 – Slope Map Analysis shows that less than 25 percent of the project site contains slopes in excess of 15 percent; therefore, the project does not trigger the requirements for the City's Hillside Development standards.

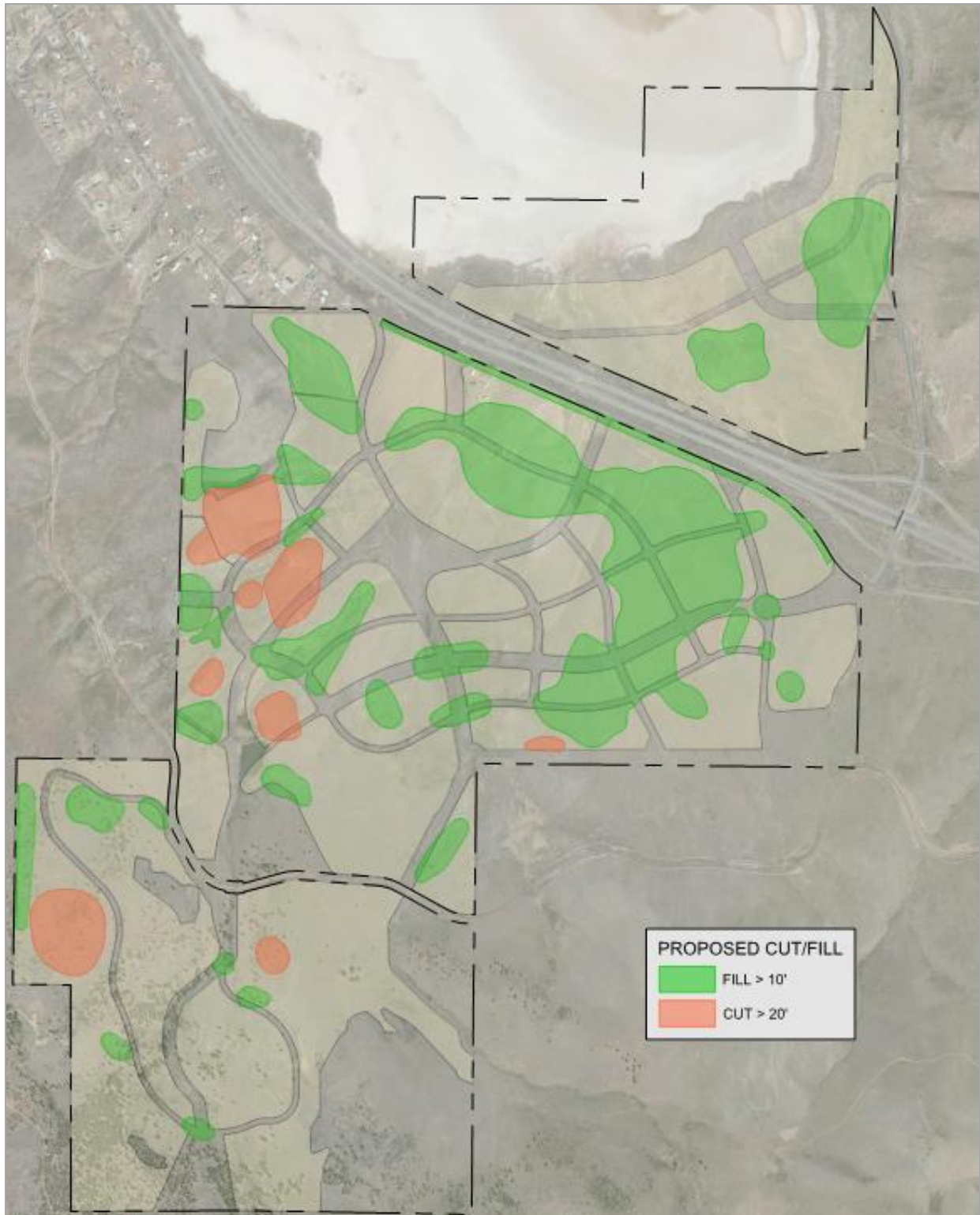
### **Hillside Design Standards**

Although the PUD as a whole does not trigger the thresholds in the RMC to be considered a hillside development, there are several areas on the site that contain slopes of greater than 30 percent. In general, these areas will be left as undisturbed open space. If development is proposed that encroaches into an area with slopes greater than 30 percent, the developer will be required to provide plans with the associated special use permit or tentative map, as applicable, demonstrating that portion of the project has been designed according to the Hillside Development Section, RMC 18.12.1610 through 18.12.1614, Slope Treatment through Hillside Architecture, as amended.

- 1) Grading within these constrained areas will incorporate hillside adaptive architecture and hillside grading strategies that reduce cuts and fills.
- 2) Grading shall mitigate environmental degradation, including slope failure, erosion, sedimentation, and stormwater run-off.
- 3) Grading shall utilize proposed practices that are appropriate for hillsides and designed to minimize the visibility of unsightly scarring.
- 4) The proposed grading shall provide open space based on hillside constraints.
- 5) The proposed grading shall adhere to applicable hillside development design standards and to Master Plan provisions related to development in sloped areas.
- 6) Roads may encroach into steeper slope categories and shall provide site-specific design solutions including, but not limited to, geotechnical recommendations, protection of slopes from erosion, pavement, and structural design.
- 7) The proposed site layout and design features shall adequately mitigate potential visual impacts of development near prominent ridgelines and within other visually prominent areas.
- 8) Open space areas shall be strategically located to include some of the site's environmental, recreational, or scenic areas.
- 9) Environmental, recreational, and scenic amenities shown in the Handbook include, but are not limited to, visually prominent areas, including ridgelines. Recreational amenities include connections to off-site amenities, rock outcrops, and viewpoints.
- 10) As much as is feasible, open space shall be retained in a natural state without clearing, grading, or other construction-related disturbance, or will be restored or improved with landscaping and/or recreational amenities.
- 11) Each grading encroachment must be determined to improve or not significantly impact the open space network.
- 12) Where possible, without significantly increasing the amount of cut and fill, angles at the edge of cut and fill slopes shall be rounded-off in a natural manner. Cut and fill slopes over ten feet in height shall be designed with natural appearing variations in slope, aspect, and surface treatment to minimize the engineered appearance of these slopes.
- 13) Split pad or stepped footings shall be incorporated into building design to allow the structure to more closely follow the slope.
- 14) The grading plans for clustered development shall demonstrate the preservation of natural features such as trees, rock outcropping, and hillsides.
- 15) Revegetation of fill slopes shall utilize vegetation, which is consistent with adjacent undisturbed vegetation that shall survive and stabilize the surface.

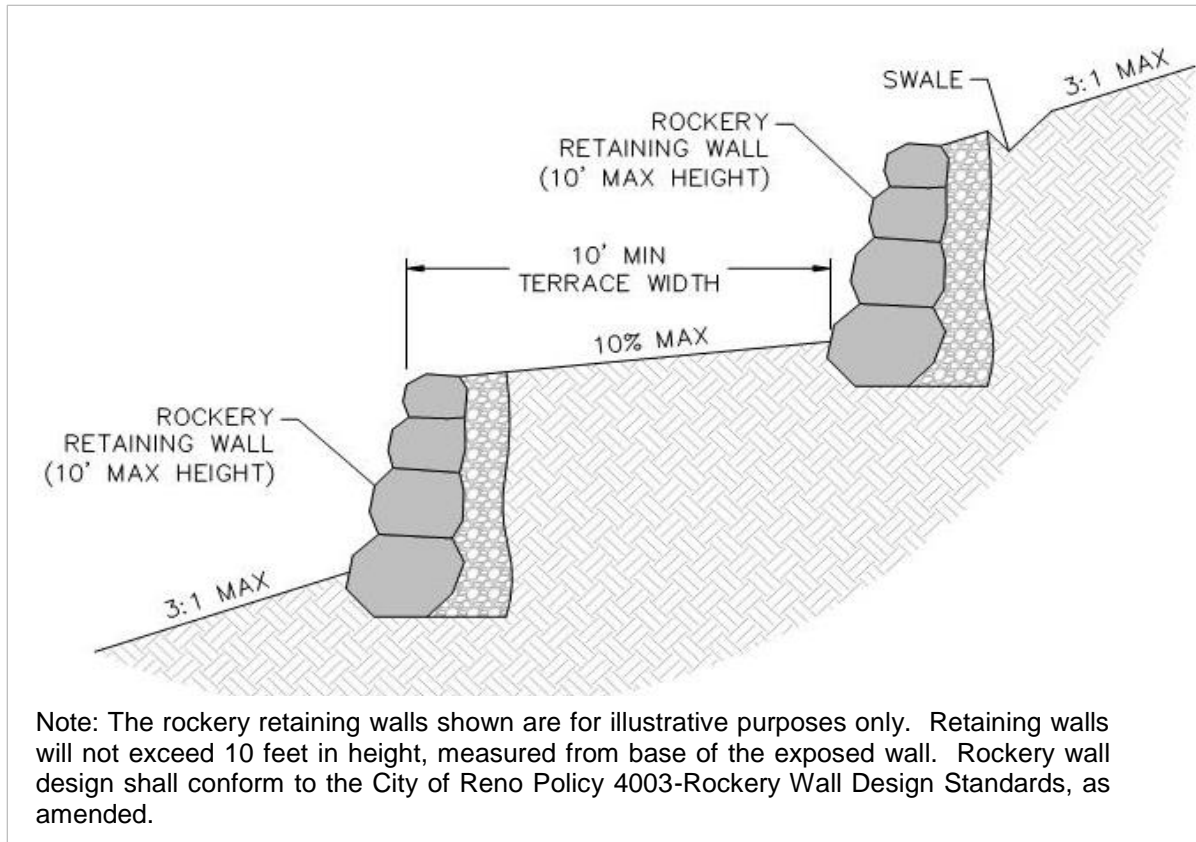


**Figure 65: Slope Map Analysis**



**Figure 66: Anticipated Cut and Fill Map**





**Figure 67: Typical Terraced Rockery Wall**

## **zy. Grading Standards**

The StoneGate Master Developer shall be responsible for construction of all the backbone infrastructure including; mass grading of the site and superpads, site improvements (roads, utilities, water, and sewer infrastructure), drainageways, and amenities (e.g. trails, parks, open space, and community center). The Master Developer will submit parcel maps, special use permits, grading and site improvement permits, and dedication tract maps per the review process in the Implementation section of this PUD Handbook. Merchant builders will purchase graded superpads with stubbed utilities and construct the in-tract infrastructure following the City's tentative and final map process. It is anticipated that mass grading of the site will balance, which will require graded materials to be transferred between the PUD phases. Temporary ponds, berms, and channels will be constructed for storm drainage run-off and erosion control during construction. Figure 66 shows the approximate locations where cuts of 20 feet or greater and fills of 10 feet or greater are anticipated. Final slope restoration requirements will be determined by the special use permit or tentative map process, as applicable.

### **Master Developer Grading Standards**

StoneGate has a wide variety of soil types. These natural resources have varying qualities and properties that will be used during mass grading, construction of site improvements, drainageway alterations, landscaping, and environmental and habitat enhancements. The Master Developer requires flexibility to utilize these resources with soil studies submitted at each SUP to identify and support the appropriate use with applicable standards as published in

the Truckee Meadows Construction Site Best Management Practices Handbook and City of Reno Policy 4005, except as amended hereinafter:

## Grading

- 1) All areas disturbed by project grading shall be revegetated and/or landscaped after final grading. Areas not designated for improvement or staging will be landscaped and/or reseeded with plants compatible with the existing on-site native vegetation upon completion of final grading. Bonding will be provided to cover the cost to restore all disturbed areas with release provisions based on completed revegetated areas per RMC 18.06.801(d), Security Required for Grading Permit, as amended.
- 2) Slopes graded less than or equal to 3:1 will be stabilized with vegetation consistent with existing on-site native plants. Rock tree pockets may be incorporated into slope treatment.
- 3) Slopes may be graded steeper than a 3:1 upon the recommendations of a geotechnical engineer and approved by the City of Reno.
- 4) Rock used for rip-rap and retaining walls shall be of a similar color to that of the existing site. If necessary, the rock will be treated with Permeon to adjust the color to match existing site conditions.
- 5) Rip-rap may be used as a slope treatment to mimic natural scree slopes, but shall not be used in individual areas greater than 10,000 SF without adding dirt fill in conjunction with native revegetation to better blend the created slopes into the area.
- 6) Unpaved temporary access roads will be constructed and maintained by the Master Developer for haul routes used by heavy earthmoving and to facilitate fire suppression. The number of temporary roadway and major drainageway crossings for earthmoving equipment will be minimized and will require temporary thickened structural sections and traffic control. The location of all haul routes, temporary access roads and roadway crossings will be reviewed and approved by the City of Reno at the time of the special use permit or tentative map, as applicable.

~~6)~~

## ~~Construction Water~~

~~Temporary on-site water storage such as ponds and/or water tanks will be used for construction water, dust control, and fire suppression. A permanent construction water fill site will be constructed in Phase 2 to facilitate construction and dust control water for merchant builders grading use. The final location and design requirements will be determined by the special use permit or tentative map, as applicable.~~

## ~~Material Processing and Stockpiles~~

~~Soils will be selectively removed, stockpiled, and processed to be reused throughout the construction of the entire project. Areas that are not subject to phased grading, selective removal, stockpiles, or processing will be left in their natural undisturbed condition.~~

- ~~1) Stockpiling shall not impair natural drainage patterns and will be protected against erosion.~~
- ~~2)1) Standards for stockpiling shall comply with RMC Section 18.08.204(d)(8), Temporary stockpiling, as amended and subject to the following modifications:~~
  - ~~a) Material processing, including crushing, material recycling, and storage is allowed when located farther than 750 feet from a residential home. Material processing and storage, excluding crushing, is allowed within 750 feet of residentially zoned property.~~



- ~~b)a) Stockpiling and associated material processing may operate 24 hours a day if there is no residential house within 750 feet. If the site is located within 750 feet of a residential house, stockpiling and material processing may operate between the hours of 6:00 a.m. and 11:00 p.m. If an adequate buffer exists between the material processing site and the residentially-zoned property, as determined by the Administrator, the Administrator may allow extend hours of operations and/or hours of material processing. Adequate buffers may include, but are not limited to, freeways, hillsides, sound walls, or structures.~~
- ~~c)a) Aggregate materials produced shall not be available for commercial sale.~~
- ~~d)a) Stockpile permits will run concurrent with each successive grading permit. Stockpiles are limited to 24 consecutive months if no grading permits are active. One extension may be granted by the Administrator for an additional 12 months if the stockpile is not within 100 feet of a residential structure.~~
- ~~e)a) Stockpiling shall not impair natural drainage patterns and will be protected against erosion.~~
- ~~f)a) Stockpiles will be fenced with high visibility safety fencing without additional visual screening.~~
- ~~g)a) The routes associated with the stockpiling activity will be approved at each respective special use permit or tentative map, as applicable.~~
- ~~h)a) Stockpile sites will require security to restore the site to pre-stockpiling conditions. These stockpile sites shall be covered under one of the following types of security:
  - ~~(1) Subdivision Bond;~~
  - ~~(2) Restoration, Landscaping, and Revegetation Bond;~~
  - ~~(3) Encroachment/Excavation Permit Bond; or~~
  - ~~(4) Labor and Material Bond.~~~~
- ~~i)a) Stockpile sites may be located in areas that are to be graded and developed in future phases.~~

## **aaz. Wildlife Protection**

In 2009, the Heinz Ranch owners mitigated the future loss of mule deer habitat, aided by the Nevada Land Trust, to transfer 409 acres of private land from the Heinz Ranch owners to the United States of America (Figure 68). This land is now administered by the BLM with the core conservation function of Mule Deer Habitat.

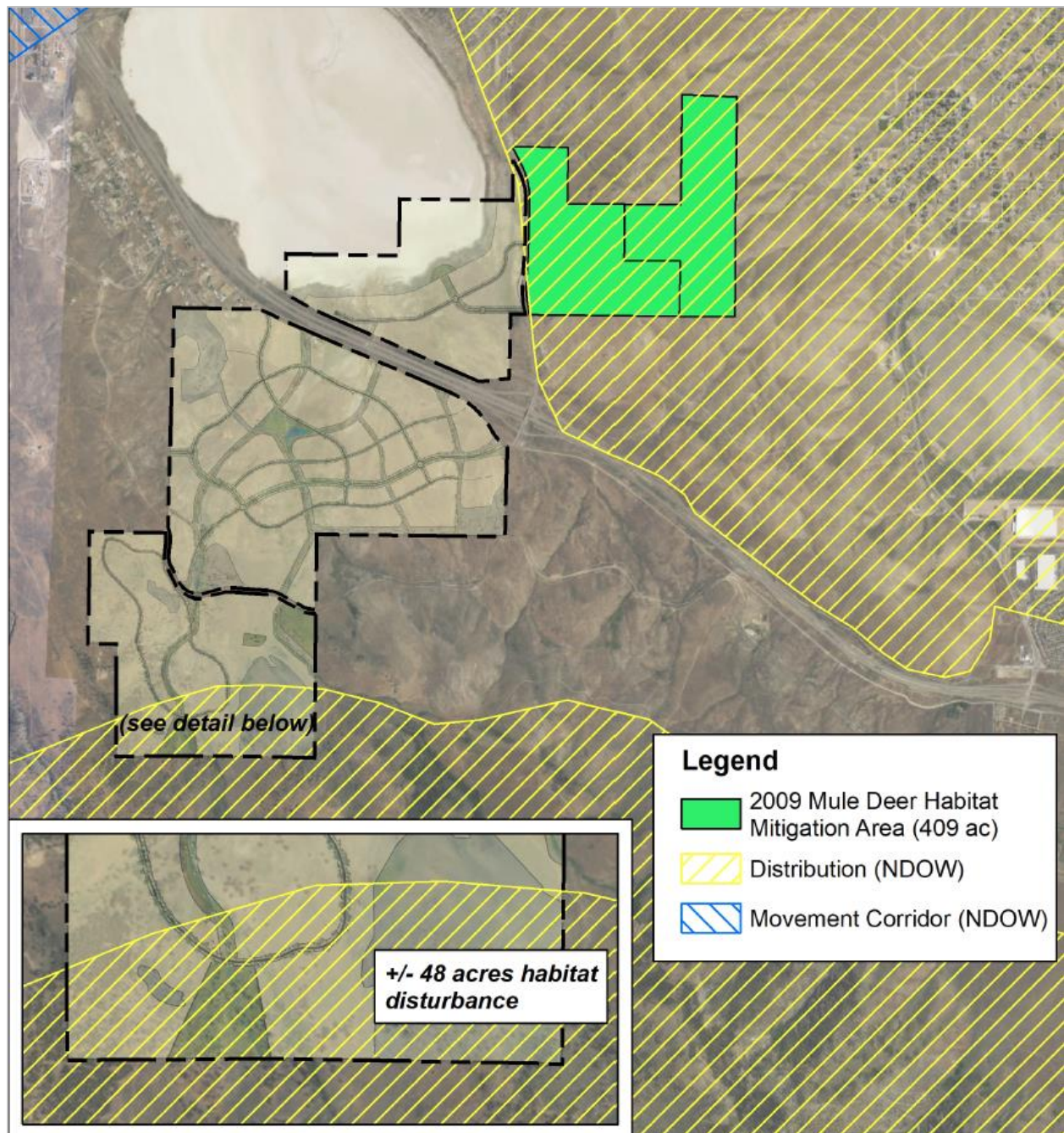
Approximately 140 acres along StoneGate's southernmost border is in an area where mule deer stay during winters. Approximately 48 acres within that area will be subject to development. StoneGate will prepare a Wildlife Interface plan to be completed and approved by the Planning Commission with the review of the first tentative map for Phase 4, which shall include drainageway improvements.

### **Wildlife Habitat Preservation**

The natural and enhanced drainage channels within StoneGate also function as wildlife habitat corridors. To address potential impacts to wildlife resulting from the development of the property, a Wildlife Interface Plan will be completed and submitted at the time of the first tentative map or prior to any drainage improvements in Phase 4. The StoneGate HOA shall create a program that informs homeowners about the projects proximity to wildlife and details how they will be addressed. Methods to protect these areas and mitigate the impacts of development may include, but are not limited to creation of open space, building setbacks, fencing, signing, and other mitigation measures.

The Wildlife Interface Plan will include requirements for wildlife habitat as follows:

- Within the 140-acre area with Mule Deer distribution, a 50-foot-wide habitat buffer of native trees and shrubs will be planted or preserved along the common areas, periphery of villages or individual lots, or combinations thereof.
- This buffer is intended to shield deer and other wildlife from developed areas.
- The buffer is subject to fuel modification zones for fire protection.
- Where seed mix will be used to introduce wildlife forage, the seed mix will be per the Wildlife Seed Mix in Book 2, Appendix J, or as approved by the Nevada Division of Wildlife.



**Figure 68: Mule Deer Habitat Migration Area\***

*\*Migration area locations and maps are subject to change.*

## **bbaa. Cultural Resources**

A Cultural Resources Inventory has been conducted on the property by Great Basin Consulting Group, LLC, included in appendix E. The study found cultural resources including prehistoric habitation sites and temporary camps, ethno historic habitations, a section of a historic emigrant trail (Beckworth Trail, a variation of the California National Historic Trail), the historic route of the Western Pacific Railroad (WPRR) (now owned by the Union Pacific Railroad [UPRR]) and labor camps associated with the construction of the WPRR, historic mining sites, and ranching properties, such as fences, roads, utilities, ditches, corrals, barns, domestic structures, agricultural and ranching equipment, and various types of refuse.

Prehistoric cultural resources within and surrounding the project area include four habitation sites, each containing ground stone artifacts (e.g., mano/handstone, metate/millingstone) indicative of food processing and flaked stone debris (e.g., projectile points, bifaces, drills, debitage). The occurrence of ground stone combined with a variety of flaked stone tools suggests that these sites were occupied on a more permanent basis, or were revisited over an extended period. In contrast, six sites that contain only flaked stone tools and debris (e.g. projectile points, bifaces, cores, and/or debitage) are indicative of temporary encampments that may be related to logistical forays, such as hunting, or to tool manufacturing.

The project area has been occupied for thousands of years based on the presence of Native American artifacts that date as far back as 3,000 years before present (B.P.) and the historic occupation of Heinz Ranch. Additional archaeological sites likely exist on the property. Historic sites relating to mining and transportation along with the ranching landscape are also prominent. Architectural resources on the property consist of several barns, 37 outbuildings, and residences. The barns are notable for their method of construction. Many are constructed of hand hewn posts and beams, and assembled with pegged mortise and tenon joinery. They date to the earliest use of the ranch. Residences generally date to the 1930s.

Prior to any construction, buildings shall be recorded (plan/profile, photographs) prior to dismantling. Portions of intact outbuildings, historic farm implements and wagons within the ranch compounds shall be retained and relocated within the StoneGate development. Materials shall be displayed in the natural landscape (i.e. wagon wheels) and used as educational material in the community center and other StoneGate community buildings.

At the time each tentative map or special use permit is reviewed, an archaeological/historic survey and treatment plan for the area under review shall be submitted to the City of Reno for review and distribution to the State Historic Preservation Office. The closest affiliated Tribe is the Reno-Sparks Indian Colony.

Development within the StoneGate PUD will adhere to Nevada Revised Statutes (NRS) 381: State Museums and (NRS) 383: Historic Preservation & Archeology.

A note shall be placed on all construction drawings and grading plans stating:

NOTE: Should any prehistoric or historic remains/artifacts be discovered during site development, work shall temporarily be halted at the specific site and the State Historic Preservation Office of the Department of Museums, Library and Arts shall be notified to record and photograph the site. The period of temporary delay shall be limited to a maximum of two working days from the date of notification.